



National Energy
Board

Office national
de l'énergie

Reasons for Decision

**TransCanada Keystone
Pipeline GP Ltd.**

OH-1-2008

July 2008

Facilities and Toll Methodology

Canada



National Energy Board

Reasons for Decision

In the Matter of

TransCanada Keystone
Pipeline GP Ltd.

Application dated 23 November 2007 pursuant
to sections 58 and 21 of the *National Energy
Board Act* for the Keystone Cushing Expansion
Project

OH-1-2008

July 2008

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Glossary of Terms and Abbreviations

AAPL	Alberta Association of Pipeline Landowners
AB	Alberta
AFL	Alberta Federation of Labour
Application or Cushing Expansion Application	application filed with the Board by Keystone on 13 November 2008 in respect of its proposed Cushing Expansion Project
bbl(s)	barrel(s); approximately 0.16 m ³
Board or NEB	National Energy Board
bpd	barrels per day
CEA Act	<i>Canadian Environmental Assessment Act</i>
Certificate OC-51	certificate of public necessity and convenience in respect of the Keystone Pipeline, approved by the Governor in Council on 22 November 2007 and subsequently issued by the Board on 29 November 2007
CAPP	Canadian Association of Petroleum Producers
\$Cdn or \$	Canadian dollars
ConocoPhillips	ConocoPhillips Company
CSA	Canadian Standards Association
Cushing Expansion Project	Keystone's proposed project to increase the nominal capacity of the Keystone Pipeline by the installation of additional pumping facilities and changes to the facilities approved in the OH-1-2007 proceeding and Certificate OC-51
ESR	environmental screening report
Hadwin	Hadwin Cattle Co. Ltd.
Keystone	TransCanada Keystone Pipeline GP Ltd.
Keystone Pipeline	Keystone's crude oil pipeline which, when constructed, will extend in Canada from Hardisty, Alberta to a location near Haskett, Manitoba at the border between Canada and the U.S., and will continue uninterrupted to markets in Patoka and Wood River, Illinois

Keystone Pipeline Project	the Canadian portion of Keystone's project to construct and operate the Keystone Pipeline, which was approved by the Board in the OH-1-2007 proceeding and in Certificate OC-51
km	kilometre(s)
KS	Kansas
kW	kilowatt
Line 100-1	one of the TransCanada PipeLines Limited lines between Burstall, Saskatchewan and Carman, Manitoba
m ³	cubic metre(s); approximately 6.3 bbls
m ³ /d	cubic metres per day
MB	Manitoba
mm	millimetre(s)
MNS	Métis Nation-Saskatchewan
MOP	maximum operating pressure
OK	Oklahoma
NEB Act or Act	<i>National Energy Board Act</i>
nominal capacity	the long-term sustainable capacity of the pipeline; for the Keystone Pipeline, this is expected to be 90 percent of the design capacity
NPS	nominal pipe size (in inches)
OH-1-2007	the proceeding in respect of Keystone's application for construction and operation of the Keystone Pipeline
OH-1-2007 Reasons for Decision	the Board's Reasons for Decision issued September 2007 in which the Board approved Keystone's application for the Keystone Pipeline Project
OM&A	operating, maintenance and administrative expenses
OPR-99	<i>Onshore Pipeline Regulations, 1999</i>
PADD	Petroleum Administration for Defense District. Regions defined by the Energy Information Administration, U.S. Department of Energy that describes a market area for crude oil in the U.S.

PADD II	region also known as the U.S. Midwest which includes the following states: Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Ohio, Oklahoma, Tennessee and Wisconsin
PADD III	region also known as the U.S. Gulf Coast which includes the following states: Alabama, Arkansas, Louisiana, Mississippi, New Mexico, Texas
PPBoR	plan, profile and book of reference
Q2	second quarter
Q3	third quarter
SK	Saskatchewan
TransCanada	TransCanada PipeLines Limited
TSA	Transportation Service Agreement
TX	Texas
U.S.	United States of America
WCSB	Western Canadian Sedimentary Basin

Recital and Appearances

IN THE MATTER OF the *National Energy Board Act* (Act or NEB Act) and the Regulations made thereunder; and

IN THE MATTER OF an application dated 23 November 2007 filed with the National Energy Board (Board or NEB) by TransCanada Keystone Pipeline GP Ltd. under files OF-Fac-Oil-T241-2007-01 01 and OF-Fac-Oil-T241-2006-01 02, for: approval of a variance pursuant to section 21 of the Act to the facilities approved by the Board's Reasons for Decision in the OH-1-2007 proceeding and in Certificate of Public Convenience and Necessity OC-51; approval pursuant to section 58 of the Act, the effect of which would permit the construction and operation of additional oil transmission facilities; and approval pursuant to Part IV of the Act of the associated tolling methodology; and

IN THE MATTER OF Hearing OH-1-2008;

HEARD in Oyen, Alberta on 8 April, 2008.

BEFORE:

S. Leggett	Presiding Member
R. R. George	Member
G. Habib	Member

Appearances

W.M. Moreland
E. Swanson

Participants

TransCanada Keystone Pipeline GP Ltd.

Witnesses

R. Jones
G. Simmonds
K. Rossiter
D. King
J. Hunt
M. Schmaltz
A. McLandress
A. Lees

J. Ness	Alberta Association of Pipeline Landowners
L. Chahley	Alberta Federation of Labour
A. Stanaforth	Canadian Association of Petroleum Producers
D. Racine K. Larocque G. Boucher	Métis Nation – Saskatchewan
J. A. Fisk	National Energy Board

Oral Statement

E. Hadwin Hadwin Cattle Company Ltd.

Arguments

Alberta Association of Pipeline Landowners

Alberta Federation of Labour

Canadian Association of Petroleum Producers

ConocoPhillips Canada Limited

Métis Nation - Saskatchewan

TransCanada Keystone Pipeline GP Ltd.



Chapter 1

Introduction

1.1 Background

Application

On 23 November 2007, TransCanada Keystone Pipeline GP Ltd. (Keystone or Applicant)¹ applied to the National Energy Board (the Board or NEB) for approval of variances to certain of the facilities approved in the Board's Reasons for Decision in OH-1-2007 dated 20 September 2007 (OH-1-2007 Reasons for Decision)², and approval for the construction and operation of additional oil transmission facilities and the associated toll methodology (Application or Cushing Expansion Application).

Specifically, Keystone requested that the Board:

- (a) vary, pursuant to subsection 21(1) of the *National Energy Board Act* (Act or NEB Act), its OH-1-2007 Reasons for Decision to approve:
 - (i) the increase in motor sizes of 20 pumping units at seven pump stations forming part of the facilities approved in the OH-1-2007 proceeding; and
 - (ii) the relocation of three of the approved pumping stations;
- (b) issue an Order pursuant to section 58 of the Act, exempting Keystone from the provisions of sections 30 through 32, as required, of the Act in respect of the proposed new facilities;
- (c) approve the proposed toll methodology, pursuant to Part IV of the Act, for the Cushing Expansion shippers; and
- (d) grant such further and other relief as Keystone may request or the Board may consider appropriate.

The Keystone Pipeline

In the OH-1-2007 Reasons for Decision, the Board approved the construction and operation of the Canadian portion of the Keystone Pipeline which, when constructed, will extend 1 235 km from Hardisty, Alberta to a location near Haskett, Manitoba at the border between Canada and the U.S. (Keystone Pipeline Project). Certificate of Public Convenience and Necessity OC-51 (Certificate OC-51) in respect of the pipeline was approved by the Governor in Council on 22 November 2007 and subsequently issued by the Board on 29 November 2007.

1 At the time of the Application, Keystone was a wholly-owned subsidiary of TransCanada Pipelines Limited (TransCanada). On 22 January 2008, ConocoPhillips Company (ConocoPhillips) acquired a 50 percent ownership in the Keystone Oil Pipeline. As a result of this acquisition, Keystone is now 50 percent owned by ConocoPhillips' wholly-owned subsidiary ConocoPhillips Canada Oil Sands Limited and 50 percent owned by TransCanada's wholly-owned subsidiary TransCanada Oil Pipeline (Canada) Ltd.

2 OH-1-2007 Reasons for Decisions dated September 2007 regarding Keystone's application for construction and operation of the Keystone Pipeline.

The Keystone Pipeline Project in Canada involves the construction of two new pipeline segments and the conversion of one existing segment of the TransCanada PipeLines Limited (TransCanada) Mainline Line 100-1 from gas to oil service. The Canadian portion of the pipeline will connect, through a new line to be built in the U.S., to markets in Wood River and Patoka, Illinois.

The facilities applied for in the OH-1-2008 proceeding would increase the nominal capacity of the Keystone Pipeline by the installation of additional pumping facilities (Cushing Expansion Project). In addition, Keystone indicated that it planned to extend the U.S. portion of the pipeline through construction of a 473 km pipeline from the Nebraska/Kansas border to Cushing, Oklahoma (Cushing Extension). Figure 1-1 is a map of the Keystone Pipeline, showing the Canadian portion and both the original and proposed additional routing in the U.S.

1.2 Regulatory Context

Process

On 14 December 2007, the Board issued a letter soliciting comments on the issues that may be relevant to, and the process for considering, the Cushing Expansion Application. Taking into account the comments received, the Board determined that it was appropriate to hear the Application orally. Accordingly, on 1 February 2008, the Board issued Hearing Order OH-1-2008 setting out the procedures to be followed in the hearing. The list of issues identified by the Board in the Hearing Order is reproduced in Appendix I.

Regulatory Considerations Under the NEB Act

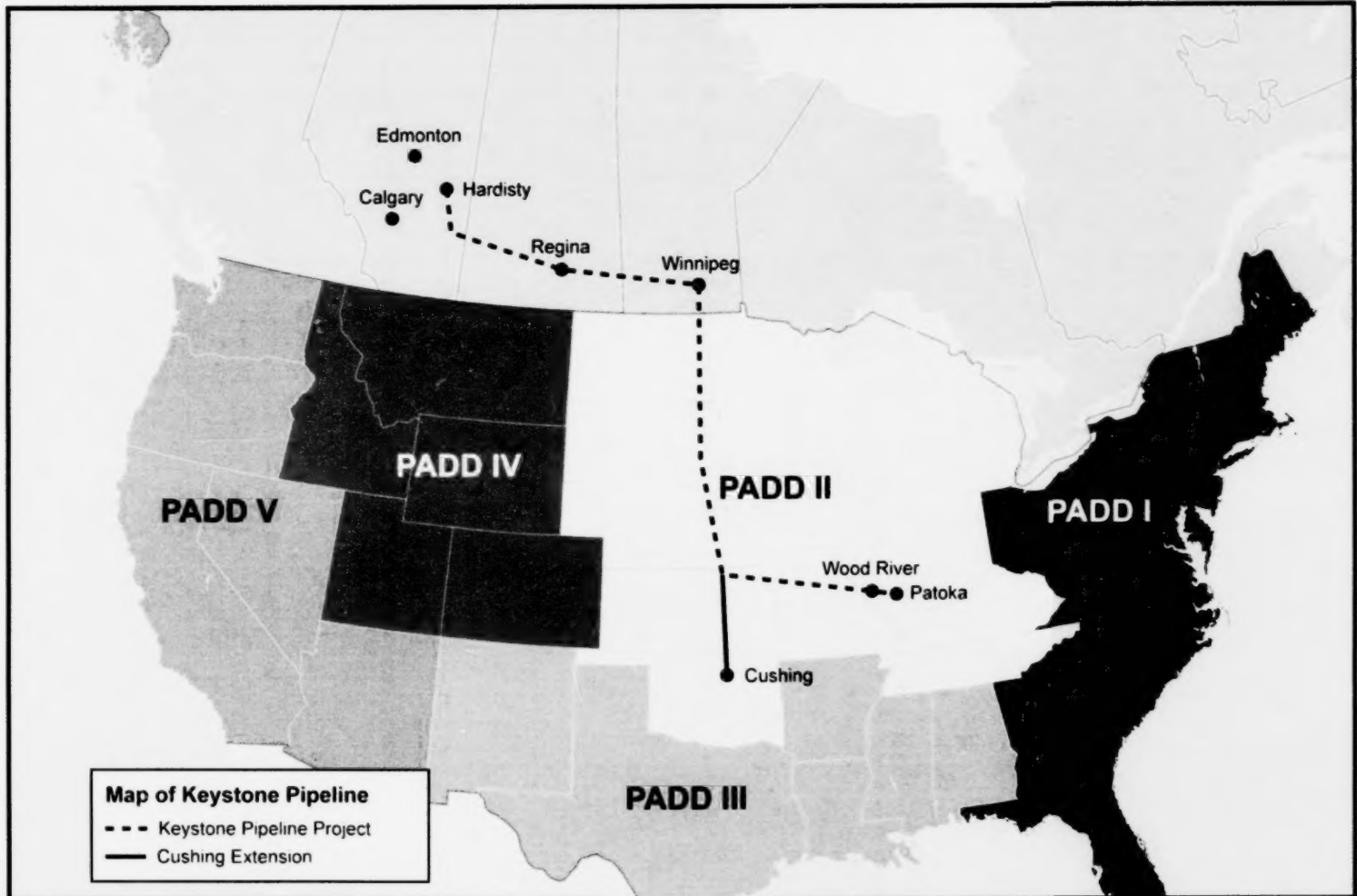
With regard to the facilities that would be modified pursuant to subsection 21(1) of the Act, the Board may review, vary or rescind any decision or order made by it. However, in accordance with subsection 21(2), the variance of a certificate is not effective until approved by the Governor in Council.

In determining whether to grant all or part of the relief requested by Keystone in respect of the facilities applied for pursuant to section 58, the Board must consider whether and to what extent it would be in the public interest to grant exemption from the provisions in the relevant sections of the Act, in this case sections 30 to 32.

The regulatory considerations related to Keystone's request pursuant to Part IV of the NEB Act are discussed in Chapter 3.

For the reader's convenience, the text of the sections of the NEB Act relevant to the Cushing Expansion Application is reproduced in Appendix II.

Figure 1-1
Keystone Pipeline



(Modified from Figure 2 1 in the Application)

1.3 Rulings

Alberta Association of Pipeline Landowners (AAPL) Motion

On 27 March 2008, AAPL filed a Notice of Motion with the Board in which it submitted that Keystone had failed to meet its consultation commitments for the Keystone Pipeline Project as required by Condition 1 of Certificate OC-51³. AAPL was seeking an order of the Board directing that these concerns be addressed and determined by the Board at the detailed route hearings in respect of the Keystone Pipeline Project, and that in the interim, the Board not determine or approve Keystone's request to vary Certificate OC-51.

In its ruling dated 28 March 2008, the Board stated that it would not presuppose what portions of the proposed detailed route might be subject to valid detailed route objection, the issues that might be raised by landowners, and the manner in which any detailed route proceedings might be conducted. Further, the Board did not accept that an alleged failure by Keystone to fulfill conditions to Certificate OC-51, even if established, was cause for the Board to discontinue its consideration of Keystone's Cushing Expansion application. The Board therefore refused AAPL's request to delay consideration of the Cushing Expansion Application. The full text of the Board's ruling is included in Appendix III.

Keystone Motion

On 3 April 2008, Keystone filed a Notice of Motion seeking an order of the Board striking from the record of the OH-1-2008 proceeding, material identified as Appendix "A" to AAPL's Written Evidence of Jim Ness.

The Board heard argument on the Motion as a preliminary matter at the commencement of the oral hearing. In its ruling, given orally on 8 April 2008, the Board was not persuaded that there would be significant prejudice to Keystone from the evidence in question being accepted on the record in the proceeding. Accordingly, the Board denied the Motion.

Keystone Request to Release the Board's Decision with Reasons to Follow

In its final argument, Keystone requested that the Board consider issuing its decision with reasons to follow.

After balancing the interests of all parties to the proceeding, the Board saw no compelling reason to issue a decision prior to its reasons and concluded that the benefits that might be derived from issuing a decision with respect to the Cushing Expansion Application with reasons to follow were outweighed by the detriments. Accordingly, the Board declined to grant the relief sought by Keystone. The full text of the Board's ruling is included in Appendix IV.

³ Condition 1 of Certificate OC-51 requires Keystone to cause the Keystone Project to be "designed, located, constructed, installed, and operated in accordance with the specifications, standards and other information referred to in its application or as otherwise agreed to during questioning in the OH-1-2007 proceeding or in its related submissions".

Late Filing of Canadian Association of Petroleum Producers (CAPP) Argument

At the oral hearing, the Board directed parties to deliver final argument in writing and established 21 April 2008 as the deadline for intervenors to file written argument. However, CAPP filed its written argument on 23 April 2008.

After considering the reasons given by CAPP in its letter, dated 1 May 2008, for the filing of its argument after the deadline, the Board granted CAPP leave to file its argument late. The full text of this ruling is included in Appendix V.

Chapter 2

Economics

In making its determination on the economic feasibility of a proposed pipeline project, the Board assesses whether the facilities are needed and would be used at a reasonable level over their expected economic life. In order to make this determination, the Board considers the evidence submitted on the supply of commodities that will be available to be shipped on the pipeline, the availability of adequate markets to receive products delivered by the pipeline and the capability of existing transportation infrastructure. As well, the Board considers evidence related to the financing of the construction and ongoing operations of the proposed project, and examines whether there is a reasonable likelihood that tolls will be paid.

In considering whether a project would be in the public interest, the Board also takes into consideration the potential impacts on commercial third parties. In this regard, the Board seeks assurance that all commercial third parties who could be affected by the outcome of the application have been notified of the application and provided an opportunity to comment.

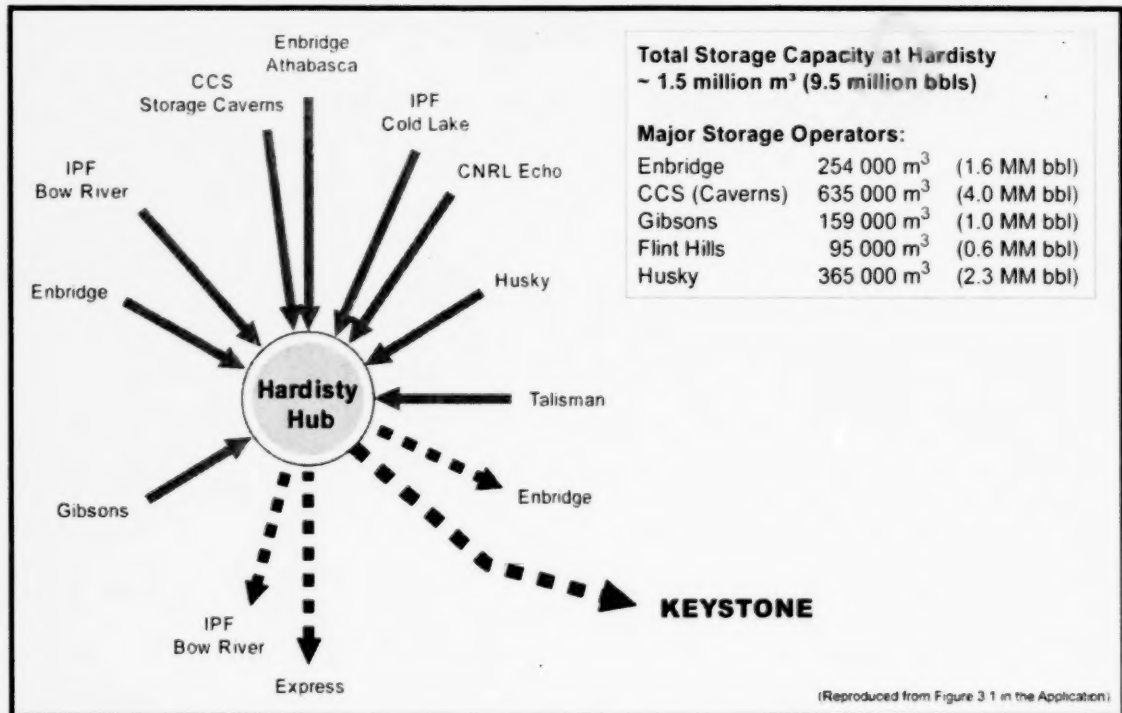
2.1 Supply, Transportation, & Markets

In support of its application, Keystone submitted that it expects production from the Alberta oil sands to grow from 178 400 m³/d (1,122,000 bpd) to 518 900 m³/d (3,264,000 bpd) between 2006 and 2016. Keystone noted that this view is consistent with the supply forecast contained in the Board's report of 15 November 2007 entitled "Canada's Energy Future – Reference Case and Scenarios to 2030."

Keystone stated that the originating point of the pipeline, Hardisty, is connected to pipelines from Edmonton, Cold Lake, Lloydminster and Fort McMurray in Alberta. According to Keystone, the total inbound pipeline capacity to Hardisty is approximately 441 500 m³/d (2,777,000 bpd) and is supplemented by transportation of petroleum by rail and truck. In addition, Keystone noted that the Hardisty area has a storage capacity of approximately 1.5 million m³ (9.5 million bbls). The Cushing Expansion would increase take-away capacity by 24 800 m³/d (156,000 bpd), or 5 percent of the current total take-away capacity of approximately 505 300 m³/d (3,178,000 bpd). Figure 2-1 reproduces the diagram of Hardisty infrastructure submitted by Keystone.

The Cushing Expansion Project would increase the nominal capacity of the Keystone Pipeline by 24 800 m³/d (156,000 bpd) to 94 000 m³/d (591,000 bpd). The pipeline would be designed to transport a range of crude oils, from light to heavy. Of the expanded capacity, 24 600 m³/d (155,000 bpd) has been contracted through an open season with an average contract duration of 16 years. Keystone noted that once in-service, the expanded pipeline would have the capability to deliver the entire 94 000 m³/d (591,000 bpd) to either of the original destinations of Wood River and Patoka, or to Cushing.

**Figure 2-1
Hardisty Infrastructure**



The proposed extension to the Keystone Pipeline in the U.S. will terminate at Cushing with an interconnect to storage facilities. Cushing is a market hub with 5.6 million m³ (35 million bbls) of unregulated crude oil storage and connections to refineries in Kansas, Oklahoma, Texas and Illinois, and the market hub at Patoka. Figure 2-2 reproduces the diagram of Cushing infrastructure as submitted by Keystone.

Keystone submitted that the Cushing Expansion would significantly increase the ability of Canadian crude oil to access the Cushing market area. Currently, Canadian crude oil has access to Cushing through the Enbridge/Lakehead/Spearhead system which has a nominal capacity of 19 900 m³/d (125,000 bpd). Refineries in the Cushing market area have a total capacity of 154 100 m³/d (969,500 bpd). Keystone would deliver the crude oil to Cushing, and connecting pipelines would deliver the crude oil to the refineries.

In its Application, Keystone identified the target markets for the expansion as the refineries in the southern portion of Petroleum Administration for Defense District (PADD) II as well as in PADD III, which are both accessible through the Cushing market hub. It stated that some of these refineries are investing in expansions and additional technology to accommodate the heavy and light types of crude oil being produced in Canada. Table 2-1 lists target market refineries as identified by Keystone.

**Figure 2-2
Cushing Infrastructure**

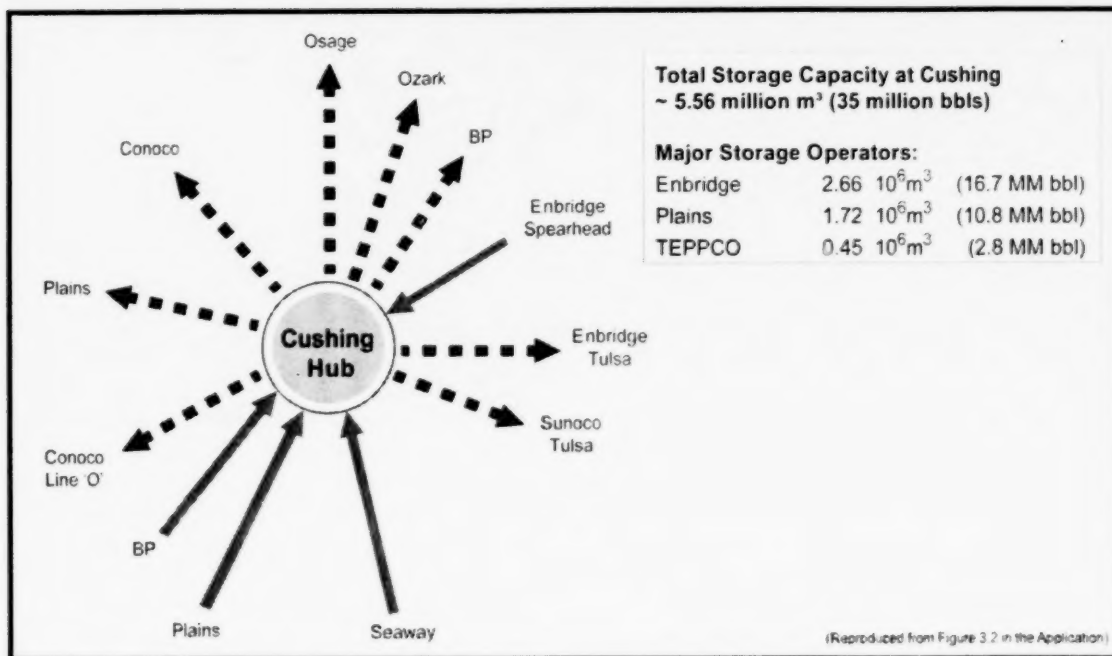


**Table 2-1
Cushing Market Area Refineries**

<u>Refinery</u>	<u>Capacity in m³/d (bpd)</u>
Coffeyville, KS	17 800 (112,000)
McPherson, KS	12 900 (81,200)
El Dorado, KS	17 500 (110,000)
Tulsa, OK (Sinclair)	11 200 (70,300)
Tulsa, OK (Sunoco)	13 500 (85,000)
Ponca City, OK	30 800 (194,000)
Borger, TX	23 200 (146,000)
McKee, TX 27	27 200 (171,000)
Total	154 100 (969,500)

(Reproduced from Table 3.1 in the Application)

Keystone submitted that the Cushing Expansion is required to move the growing supply of crude oil from the Western Canadian Sedimentary Basin (WCSB). In its view, the level of contracted capacity provides clear evidence of the need for incremental pipeline capacity from the WCSB to the Cushing market. Keystone added that the contract shippers are significant western Canadian producers and downstream refiners with experience in crude oil marketing and transportation.

Views of Parties

No party challenged Keystone's evidence on supply, transportation and markets.

CAPP supported the Application and argued that there is a clear market need for the incremental capacity that would be achieved by the Cushing Expansion Project as the evidence clearly demonstrated the tremendous growth anticipated in Canadian supply.

The Alberta Federation of Labour (AFL), although opposed to the Application, indicated in its final argument that it was not opposed to the development of pipeline infrastructure and markets required to support the growing oil sands industry.

2.2 Ability to Finance

Keystone submitted that the estimated \$348 million cost of the Cushing Expansion Project would be funded by Keystone's parent companies, TransCanada and ConocoPhillips Company (ConocoPhillips). TransCanada and ConocoPhillips would in turn fund these requirements using a combination of internally-generated cash flow and funds obtained from Canadian and U.S. capital markets.

No concerns were raised and no parties sought to examine Keystone regarding the proposed financing.

2.3 Other Economic Considerations

In its Application, Keystone did not provide information regarding if and when it notified commercial third parties of the Application. However, following direction from the Board, Keystone notified its shippers, interested parties and parties to the OH-1-2007 proceeding of the Application, and also published the Hearing Order in twenty-four newspapers.

Views of Parties

CAPP

Given its views regarding the anticipated substantial growth in Canadian crude oil supply and need for incremental transportation capacity, CAPP argued that trapped supply is not in the Canadian public interest. CAPP further argued that the Canadian energy industry has developed within the context of the Canadian Government market-oriented policies dating back to the 1985 Western Accord. CAPP understood this to mean that market forces should determine where and when energy developments should proceed and how supply and markets should choose to become connected. In CAPP's view, the Cushing Expansion Application is an example of the market working to put necessary infrastructure in place.

AFL

AFL was of the view that the Board had little evidence on how the Cushing Expansion Project would impact the Canadian public interest. Specifically, AFL submitted that evidence was needed as to how approval of the Application would impact Canadian upgrading, refining and secondary industries and associated employment and investment. Of central concern in its submissions was

the proposition that approval of the Cushing Expansion Project might mean a lost opportunity to generate thousands of permanent full time jobs in Canada that could be created by upgrading bitumen prior to export. AFL submitted that it could not study such impacts itself because it cannot access the required information. It argued that the Board should demand that applicants undertake studies of how their projects impact Canadian value-added production.

AFL also argued that public policy is one of the considerations relevant to the Board's decision, and that public policy is particularly unsettled at the moment. AFL consequently questioned how the Board could ensure that its decision would properly consider energy policy aspects when they are still being developed. AFL argued that approval of the Application would result in significant investments in U.S. refineries in order to allow them to process Canadian crude and that such investments will not be undone at some later point if and when Canadian energy policy changes.

AFL argued that the Board should either deny the Application or delay its decision until evidence was gathered on the broad value-added impacts of the Cushing Expansion Project, or until there was more information on Canada's energy policy objectives.

Views of Keystone

Keystone disagreed with AFL's statement regarding the inadequacy of the evidentiary record with respect to how the Cushing Expansion Project would impact Canadian upgrading and refining. Keystone pointed to its response to an AFL Information Request which showed that two-thirds of the Canadian bitumen forecast to be produced in 2015 is expected to be upgraded in Canada. The response also stated that a lack of pipeline capacity would be expected to have a similarly adverse impact on both the total amount of oil sands production and the amount of crude that would be upgraded in Canada.

In response to AFL's view that the Board should require applicants to study broader project impacts, Keystone submitted that the evidentiary record supported its view that it had properly scoped its socio-economic assessment of the Cushing Expansion Project. With respect to the impact on the interest of Canadians, Keystone argued that it had submitted evidence that the pipeline would be capable of moving a range of products, including upgraded bitumen.. It further argued that well functioning markets require adequate transportation capacity to connect supply to markets, and well functioning markets tend to produce outcomes that are in the public interest. Keystone also submitted that a determination in the public interest must consider the adverse economic impacts that could be expected to arise from inadequate pipeline takeaway capacity.

Views of the Board

As a result of the publication of the Hearing Order and subsequent hearing process, the Board is satisfied that commercial third parties who might be affected by the outcome of the Application were made aware of it and given the opportunity to comment to the Board. However, for future applications, especially for those that may not be the subject of an oral hearing, the Board expects that Keystone will provide specific evidence relating to commercial third party notification, consistent with the requirements outlined in the *NEB Filing Manual*.

The Board finds the assessment of supply, transportation infrastructure and markets for western Canadian crude oil submitted by Keystone to be reasonable. The Board notes that the Cushing Expansion would provide flexibility for both original Keystone Pipeline and Cushing Expansion shippers to access any of the markets served by the expanded pipeline, including both the Cushing hub and the Wood River and Patoka region. Based on this evidence, the Board is satisfied that there will be sufficient supply and markets to support the Keystone Cushing Expansion.

The Board accepts that Keystone's parent companies have the ability to finance the construction of the Cushing Expansion Project and place it into service, and finds that the proposed method of financing is reasonable. Given the long-term transportation contracts for 24 600 m³/d (155,000 bpd) of the 24 800 m³/d (156,000 bpd) total Cushing Expansion capacity, as well as CAPP's support for the expansion, the Board is of the view that tolls are likely to be paid.

Finally, the Board considered arguments raised by AFL. Among them was the suggestion that applicants should be required to provide analysis of "the bigger and more important question of broader impacts on value-added production in Canada". However, the Board finds that, in this case, the evidentiary record is adequate to permit it to make a determination in the Canadian public interest.

The Board is not persuaded by AFL's argument that approval of the Cushing Expansion Project might mean a lost opportunity to generate thousands of permanent full time jobs in Canada, particularly in light of Keystone's evidence that the expanded Keystone Pipeline would have the capability to ship a full range of crude oil products including synthetic crude upgraded in western Canada, and could, if required, be modified to carry refined products.

The Board is also of the view that it is not necessary to either deny the application or suspend its consideration until such time as energy policy might be further clarified. As it expressed in the OH-1-2007 Reasons for Decision, while the Board is informed by the positions of individual parties as well as government expressions of current economic and energy policy, its decision in the public interest must also balance a multitude of other competing political, economic and social interests. For example, the Board considered the fact that no government body or refiners/upgraders expressed opposition to the Application.

Taking the evidence and the above considerations into account, the Board is satisfied that, in this case, it can make a well-informed public interest determination, notwithstanding AFL's view that energy policy may continue to evolve. The Board also concludes that the Cushing Expansion Project is economically feasible and, on balance, will likely provide a positive economic benefit for Canadians.

Chapter 3

Traffic, Tolls and Tariffs

Keystone applied for approval of the proposed toll methodology pursuant to Part IV of the NEB Act. In assessing a proposed methodology, the Board considers whether the resulting tolls would be just and reasonable, and whether under substantially similar circumstances and conditions with respect to all traffic of the same description carried over the same route, the tolls would be charged equally to all persons at the same rate. The Board also must be satisfied that the toll methodology would not result in any unjust discrimination in tolls, service or facilities. Specifically for an oil pipeline, the Board must also be satisfied that the pipeline would receive, transport and deliver all oil offered to it for transmission.

3.1 Contracted Capacity

On 30 January 2007, Keystone announced an open season process to acquire binding commitments for 24 800 m³/d (156,000 bpd) to support the Cushing Expansion Project and the Cushing Extension. The open season process, which was open to all shippers, was conducted between 30 January 2007 and 14 March 2007.

On 3 July 2007, Keystone announced that as a result of the open season it had secured 24 600 m³/d (155,000 bpd) of new firm contracts from Hardisty to Cushing with an average duration of 16 years. Together with the 54 100 m³/d (340,000 bpd) of firm contracts previously secured in the original Keystone Pipeline open season, the total committed capacity on the expanded Keystone Pipeline would be 78 700 m³/d (495,000 bpd) out of a total nominal capacity of 94 000 m³/d (591,000 bpd). This would leave 15 300 m³/d (96,000 bpd) of uncommitted capacity available on the pipeline for the transportation of non-contracted crude oil shipments.

In the event that additional shipper demand materializes, Keystone stated that it may offer a portion of the uncommitted capacity through a future open season process on similar terms and conditions to all potential shippers, including its part owner ConocoPhillips. However, Keystone committed to reserve 5 600 m³/d (35,000 bpd) as uncommitted capacity. This would be an increase of 1 600 m³/d (10,000 bpd) in capacity reserved for uncommitted shipments over that noted in the OH-1-2007 Reasons for Decision and would maintain the same percentage of total pipeline capacity for uncommitted shipments.

No party expressed views regarding the adequacy of the open season or the resulting capacity allocation.

3.2 Tolls

Keystone proposed to charge tolls for two types of service to Cushing: Committed Service which would be supported by a Transportation Service Agreement (TSA); and Uncommitted Service not supported by a TSA. As determined by the Board in the OH-1-2007 Reasons for Decision, the tolls on the Keystone Pipeline will be regulated on a complaint-basis in accordance with the

Committed Tolls

Keystone submitted that the proposed committed tolls, comprised of both a fixed and variable component, resulted from arms-length negotiations between sophisticated parties. It also submitted that it was accepting certain risks which it would not have borne under a traditional cost-of-service model.

The fixed toll was designed to recover capital related costs assuming full-system utilization. It is to be constant for the term of each TSA such that committed shippers would benefit from long-term price certainty. The Cushing Expansion open season offered 10, 15, and 20 year contracts, with tolls that decrease as the contract term increases. This is in recognition of the additional financial commitment provided by longer-term contracts, since term shippers are committed to pay the fixed toll for their contracted volumes regardless of whether they ship those volumes. As well, in return for signing long-term contracts, shippers would benefit from unapportioned priority access to Cushing for amounts up to their contracted volumes, and would have a one-time option to extend their contract term.

Before the final fixed toll would be established for the term of the TSAs, the fixed toll would be subject to adjustment in two stages based upon changes in capital costs. First, within two months of receiving all Canadian and U.S. regulatory approvals required for both the original Keystone Pipeline and Cushing Expansion facilities, Keystone would re-estimate the capital costs. The fixed toll would change by the same percentage as the percentage change between this re-estimate and the initial capital cost estimate contained in the TSA. Committed shippers would have the right to audit the calculations underlying the re-estimated capital costs. Second, within two years of the Cushing Expansion in-service date, Keystone would determine the final actual project costs, and the fixed toll would change by one-half of the percentage difference between this amount and the re-estimated capital costs. Keystone would thereby be accepting a portion of the construction cost risks in order to provide additional toll certainty and to align with shippers in a desire to minimize construction costs.

Keystone submitted that the variable component of the committed toll would reflect an allocation of total estimated operating, maintenance and administrative expenses (OM&A). The variable toll is intended to provide Keystone with a flow-through recovery of actual operating costs associated with actual volumes shipped. As such, it would vary with the type of crude oil transported and change over time to reflect changes in OM&A and volumes transported. Keystone agreed to seek to negotiate an OM&A incentive arrangement after the third anniversary of the Cushing Expansion's in-service date.

The illustrative committed tolls provided by Keystone, as shown in Table 3-1, are based on Keystone's most recent capital cost estimate of \$1,664 million. This capital cost estimate includes the Cushing Expansion costs as well as the costs of the original Keystone Pipeline facilities, both of which would influence the committed tolls for Cushing Expansion shippers.

Table 3-1
Illustrative Committed Tolls from Hardisty,
Alberta to the International Border

<u>Line</u>	<u>Term of Contract:</u>	<u>10 Years</u>		<u>15 Years</u>		<u>20 Years</u>	
		<u>Units:</u>	<u>\$/m³</u> <u>\$/bbl</u>	<u>\$/m³</u> <u>\$/bbl</u>	<u>\$/m³</u> <u>\$/bbl</u>	<u>\$/m³</u> <u>\$/bbl</u>	<u>\$/m³</u> <u>\$/bbl</u>
1.	Fixed Toll		7.041 1.120	6.943 1.104	6.794 1.080		
2.	Variable Toll* - Light		<u>1.761</u> <u>0.280</u>	<u>1.761</u> <u>0.280</u>	<u>1.761</u> <u>0.280</u>		
3.	Total - Light (1+2)		8.802 1.400	8.704 1.384	8.555 1.360		
4.	Variable Toll* - Heavy		<u>2.515</u> <u>0.400</u>	<u>2.5.1</u> <u>0.400</u>	<u>2.515</u> <u>0.400</u>		
5.	Total - Heavy (1+4)		9.556 1.520	9.458 1.504	9.309 1.480		

* Variable toll is based on throughput of 94 000 m³/d (591,000 bpd)

(Reproduced from Table 5.1 in the Application)

Keystone submitted that the complaint-related clauses in the TSA are consistent with its tolls being regulated on a complaint-basis. With regard to Article 2 in the TSA⁴, Keystone stated that this clause was not intended to preclude a committed shipper from availing itself of any rights it might have to pursue a complaint to the NEB in respect of the terms and conditions of service. Keystone also pointed to TSA Article 11.5 which states that the TSA is subject to the rules, regulations and orders of any regulatory or legislative authority having jurisdiction, which would include the NEB.

Uncommitted Tolls

Keystone stated that the uncommitted toll proposed by Keystone was designed to be a market-based toll, equal to a maximum of 120 percent of the committed toll applicable to the 10-year contract term. The premium recognizes the significant financial commitments made by term shippers. Keystone could file an application to have this toll discounted, in the event that it is uncompetitive in the marketplace. As described in the TSA, should this situation arise, some committed tolls would in turn be reduced in certain instances, in order to keep them below the uncommitted tolls. Keystone's comparison of the illustrative uncommitted tolls and the 10-year committed tolls is shown in Table 3-2.

Table 3-2
Comparison of Illustrative Uncommitted and Committed Tolls from Hardisty,
Alberta to the International Border

<u>Units (\$Cdn)</u>	<u>Uncommitted</u>		<u>Ten Year Committed</u>	
	<u>\$/m3</u>	<u>\$/bbl</u>	<u>\$/m3</u>	<u>\$/bbl</u>
Light Crude	10.561	1.679	8.801	1.400
Heavy Crude	11.467	1.823	9.556	1.519

(Reproduced from Table 5.3 in the Application)

⁴ Article 2 states in part that shippers agree not to "oppose, intervene against, or seek to delay, whether directly or indirectly, any of (Keystone's) or Keystone US's applications for Regulatory Approvals"

In the event of an apportionment situation for nominations to Cushing, any volumes left over after meeting the committed Cushing volume requirements would be allocated on a *pro rata* basis among all remaining nominations.

Toll Comparison for Cushing versus Patoka and Wood River Shippers

The Application indicated that the applied-for toll methodology for both committed and uncommitted service would be for transportation from Hardisty to the international border near Haskett. However, Keystone indicated in examination that the negotiated fixed toll to the international border would be different depending on whether the service provided is to Cushing or to the original Keystone destinations of Patoka and Wood River. As a result, even though the variable toll to the international border would not vary with the ultimate destination, both the total committed and uncommitted tolls to the international border would be dependant on the ultimate destination. Keystone submitted that this is consistent with the requirement of section 62 of the NEB Act⁵, that all tolls "shall always, under substantially similar circumstances and conditions with respect to all traffic of the same description carried over the same route, be charged equally to all persons at the same rate".

Keystone submitted that the original Keystone Pipeline Project tolls and those of the Cushing Expansion Project were negotiated in commercial and risk environments which were markedly different. Among the facts supporting this position, Keystone noted that the projects would have different in-service horizons, and that for both committed and uncommitted shippers, a specific downstream U.S. delivery point would have to be specified prior to shipment on the Canadian part of the Keystone Pipeline. Keystone was therefore of the view that the tolls would be different for different traffic offered under substantially dissimilar circumstances and conditions.

Keystone noted that shippers with term contracts to either Cushing or Wood River/Patoka would have the option to nominate their volumes to the alternate destination. Keystone indicated that the tolls and delivery right agreements for alternative destination nominations are currently under negotiation.

No concerns were raised and no parties sought to examine Keystone on the committed or uncommitted toll methodology, or related submissions.

Views of the Board

Contracted Capacity

In previous decisions, the Board has found that an oil pipeline acts in a manner consistent with its common carrier obligations when an open season is properly conducted and where the facilities are either readily expandable or capacity is left available for monthly nominations.

In this case, the Board is satisfied that the open season conducted by Keystone granted all potential shippers a fair and equal opportunity to

5 The text of section 62 is reproduced in Appendix II.

participate. The Board notes that the 16 percent of the expanded Keystone Pipeline capacity, 15 300 m³/d (96,000 bpd), which is not secured by contracts will be available for non-contracted crude oil shipments. Keystone has committed to reserve 5 600 m³/d (35,000 bpd), or approximately six percent of nominal capacity, to be offered as uncommitted capacity. The Board further notes Keystone's confirmation that all potential shippers would be offered the same terms of service in any future open season that may be conducted to secure contracts for firm service for any part of the 8 500 m³/d (61,000 bpd) that is not currently under contract or reserved for uncommitted shippers,

In light of these conclusions and the fact that no participant disputed the fairness of the open-season or resulting capacity allocation, the Board finds that Keystone's proposal is consistent with its common carrier obligations as set out in subsection 71(1) of the NEB Act⁶.

Tolling Methodology

Given that Keystone's proposed methodology for establishing committed tolls resulted from negotiations between sophisticated arms-length parties and that no party raised any objections in this regard, the Board finds that the resulting committed tolls are just and reasonable.

The Board has considered the proposed methodology whereby committed tolls would decrease with the length of contract term, and uncommitted tolls would be set at a premium of up to 20 percent over the 10-year committed toll. The Board accepts that this, as well as the proposed unapportioned access and renewal rights for committed shippers, is a reflection of shippers having provided differing levels of financial support to the Cushing Expansion Project and having accepted differing levels of risk. As a result, the Board finds that no unjust discrimination would result from the proposed differentiation of tolls among Cushing Expansion shippers⁷. Therefore, the Board finds the proposed method for establishing the uncommitted toll to be just and reasonable.

The Board accepts the proposed method for discounting the uncommitted toll in the event that it becomes uncompetitive in the market, and directs Keystone to comply with the following requirement, consistent with the Board's direction in the OH-1-2007 Reasons for Decision:

In the event that Keystone determines that the uncommitted Cushing toll is uncompetitive and files with the Board to reduce the level of the toll, Keystone is required to provide

6 The text of subsection 71(1) is reproduced in Appendix II.

7 The text of section 67 is reproduced in Appendix II.

supporting documentation including an explanation of the discounting mechanism.

With regard to the differing tolls for Cushing and Wood River/Patoka shippers, the Board accepts that the tolls for committed Cushing shippers were negotiated in different commercial and risk environments than were present at the time of negotiation of the committed tolls for service to Wood River and Patoka. The Board also accepts that delivery to the international border is only notional, and notes that shippers in Canada must nominate for service to a specific final destination in the U.S. For these reasons, the Board finds that Keystone's proposal to charge different tolls to the international border depending on the ultimate full-path U.S. delivery point is consistent with the requirements of section 62 of the NEB Act.

Chapter 4

Engineering

In its examination of pipeline and facility applications, the Board considers relevant safety issues to ensure companies design, construct and operate their facilities in a safe manner. The Board determines whether the proposed project meets regulatory requirements concerning the safety of employees and the public and may examine issues such as the suitability of the proposed design, construction techniques, materials and control systems, pipeline security and measures to ensure ongoing pipeline integrity.

4.1 Project Description and Design

Facilities Applied For Pursuant to section 58

The proposed Cushing Expansion facilities include the installation of seven new pump stations and the addition of pumping units at 13 of the pump stations approved in OH-1-2007, as listed in Table 4-1. The locations of these pump stations are shown in Figure 4-1. As part of the proposed facilities, seven additional block valves and pump station suction and discharge valves would be added along the Keystone pipeline at the new pump stations.

Keystone indicated that the proposed facilities would be designed, constructed and operated in accordance with the Board's *Onshore Pipeline Regulations, 1999* (OPR-99), Canadian Standards Association (CSA) Z662-07 and all other applicable standards, specifications and codes referenced in the Cushing Expansion Application.

Facilities Applied For Pursuant to section 21

Keystone also applied to increase the motor size of 20 pumping units at seven pump stations approved in OH-1-2007. Keystone indicated it undertook detailed engineering to determine the optimum set of pumping facilities and as a result, concluded that all of the units at the pump stations on the two 762 mm (NPS 30) pipeline segments should be 3700 kW each instead of 3000 kW. On the 864 mm (NPS 34) segment, Keystone proposed to retain the 3000 kW motor size as approved. Details of the proposed change in motor size are provided in Table 4-2. The locations of the stations are shown in Figure 4-1.

In addition, Keystone applied to relocate three of the pump stations (PS 7, PS 8 and PS 27) approved in Certificate OC-51. Keystone explained that the relocations of PS 7 and PS 8 would be minor and would not have a significant effect on the hydraulic design of the pipeline. PS 7 would be moved out of native range to higher ground, currently in hay production, and closer to existing year round access; and PS 8 would be moved primarily due to topography. The relocation of PS 27 by 3 km would accommodate relocations of pump stations in North Dakota. The pump stations that would be relocated are identified in Figure 4-1.

Table 4-1
Cushing Expansion Additional Facilities

<u>Pump Station Number & Name</u>	<u>Province</u>	<u>Number of Pumping Units & Size</u>
PS 5 - Hardisty	AB	2 x 3700 kW
PS 6 - Lakesend	AB	3 x 3700 kW
PS 7 - Monitor	AB	2 x 3700 kW
PS 8- Oyen	AB	2 x 3700 kW
PS 9 - Bindloss	AB	1 x 3700 kW
PS 10 - Liebenthal*	SK	3 x 3000 kW
PS 11 - Cabri	SK	1 x 3000 kW
PS 12 - Stewart Valley*	SK	2 x 3000 kW
PS 14 - Chaplin*	SK	2 x 3000 kW
PS 16 - Belle Plaine*	SK	2 x 3000 kW
PS 17 - Regina	SK	1 x 3000 kW
PS 18 - Kendal	SK	1 x 3000 kW
PS 20 - Whitewood*	SK	2 x 3000 kW
PS 21 - Moosomin	SK	1 x 3000 kW
PS 22 - Crandall*	MB	2 x 3000 kW
PS 23 - Rapid City	MB	1 x 3000 kW
PS 24 - Wellwood*	MB	1 x 3000 kW
PS 25 - Portage la Prairie	MB	1 x 3000 kW
PS 26 - Carman	MB	1 x 3700 kW
PS 27 - Haskett	MB	2 x 3700 kW
Totals		13 x 3700 kW 20 x 3000 kW

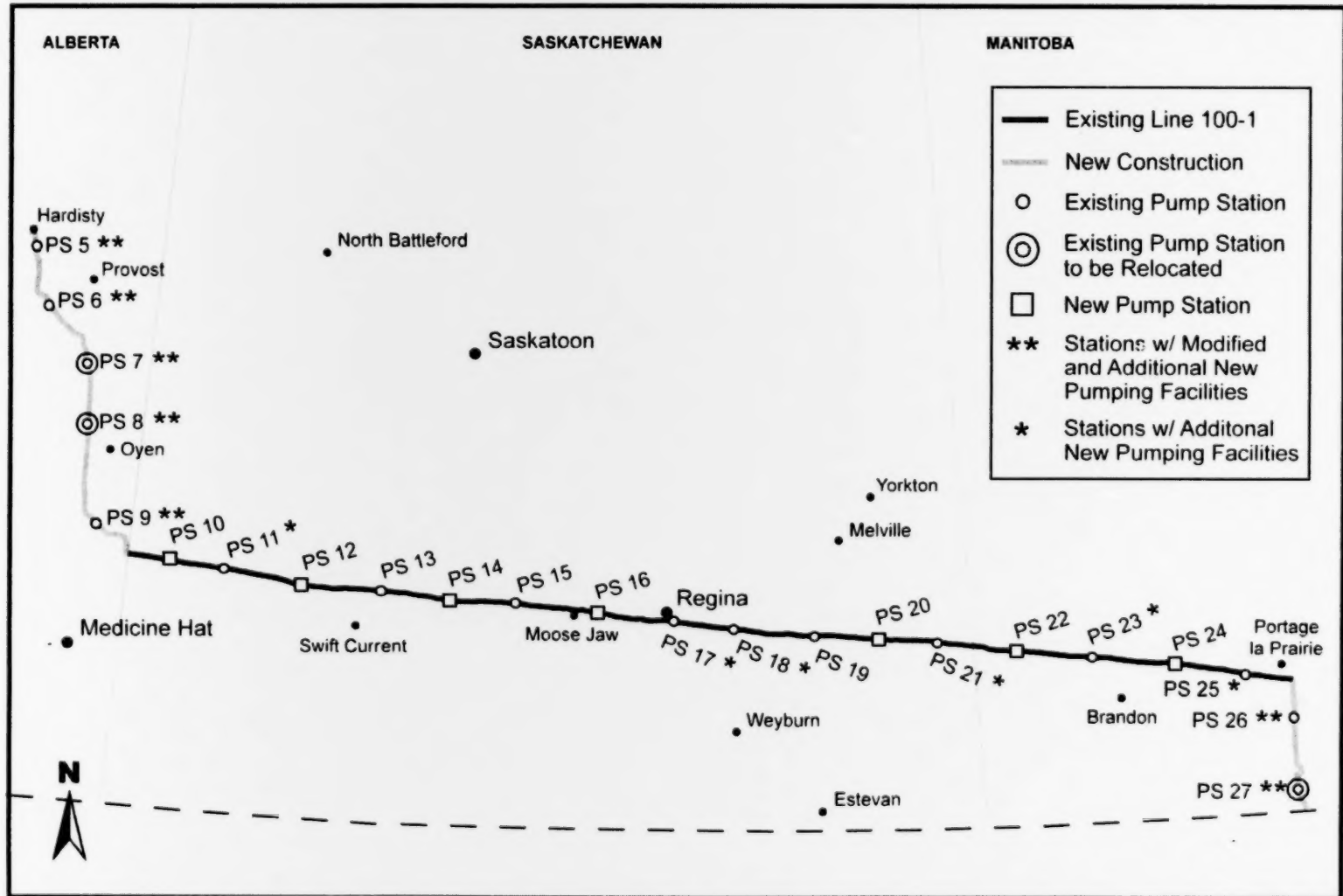
* New pump station
(Modified from Table 6.1 in the Application)

Table 4-2
Change in Pumping Unit Size

<u>Pump Station Number & Name</u>	<u>Province</u>	<u>Approved Pumping Units & Size</u>	<u>Proposed Pumping Units & Size</u>
PS 5 - Hardisty	AB	4 x 3000 kW	4 x 3700 kW
PS 6 - Lakesend	AB	2 x 3000 kW	2 x 3700 kW
PS 7 - Monitor	AB	3 x 3000 kW	3 x 3700 kW
PS 8 - Oyen	AB	3 x 3000 kW	3 x 3700 kW
PS 9 - Bindloss	AB	3 x 3000 kW	3 x 3700 kW
PS 26 - Carman	MB	3 x 3000 kW	3 x 3700 kW
PS 27 - Haskett	MB	2 x 3000 kW	2 x 3700 kW
Totals		20 x 3000 kW	20 x 3700 kW

(Reproduced from Table 6.2 in the Application)

Figure 4-1
Keystone Pipeline Pump Station Locations



Keystone originally indicated that it would construct sump tanks with a capacity of 37.8 m³ (10,000 U.S. gallons) at all pump stations along the Keystone pipeline, which was an increase from the 22.7 m³ (6,000 U.S. gallons) capacity approved in OH-1-2007. Keystone stated that the larger tank size was required to drain down the extra piping put in place as part of the detailed engineering process. However, in final argument, Keystone indicated that sump tank capacity changes were not necessary for previously approved sites and updated the record to indicate that it proposed to construct the sump tanks with a capacity of 37.8 m³ for the new pump stations only.

4.2 Construction Schedule

In order to minimize construction costs and environmental impacts, Keystone planned to coordinate the construction of the Cushing Expansion facilities with the construction of the Keystone Pipeline. Keystone proposed to install the piles and foundations for the seven additional pump stations required for the Cushing Expansion during construction of the Keystone pump stations, planned between May 2008 and November 2009. In addition, a block valve assembly would be installed at the Cushing Expansion pump stations during the conversion activities of the Keystone Pipeline facilities from natural gas to oil service, scheduled in Q2 and Q3 of 2008.

Keystone originally requested a decision on the application by May 2008 as it did not anticipate that the process for consideration of the Cushing Expansion application would involve an oral hearing process and the timeframe associated with that. During final argument Keystone requested a decision from the Board as soon as is feasible and urged the Board to consider the issuance of a decision, with reasons to follow, in order to achieve the benefits of co-construction. The Board denied Keystone's request in a letter dated 30 April 2008⁸.

4.3 Project Operations and Safety

In order to assess the consequences of a failure due to the increase in flow rate as a result of the Cushing Expansion, Keystone provided risk results using outflow modeling for the Canadian portion of the Keystone Pipeline. Keystone stated it analyzed the combined risk results for the Cushing Expansion design flow rate with the seven additional mainline block valves at the proposed pump stations. Keystone submitted that the probability of failure would not change with the proposed additional facilities and the analysis determined that no further additional valves would be required to mitigate potential spill volumes. Keystone further submitted that there would be a small incremental difference in potential spill volume and its emergency response plan would achieve the same level of cleanup as would exist in the no-expansion case. Keystone also confirmed that anticipated leak detection times for the pipeline would not change as a result of the Cushing Expansion Project.

Keystone stated it would develop a complete library of corporate standards, procedures and specifications that would be incorporated into the design and operation of its pipeline systems. Keystone indicated its integrity management program would not change significantly as the only impact would potentially be the pressure cycles experienced under the new flow regime, and confirmed that it would conduct an in-line inspection plan considering corrosion features at the higher flow rate. Keystone also committed to update the engineering assessment as a result of the Cushing Expansion Project, which would determine the suitability of Line 100-1 for liquid service.

8 The full text of the Board's 30 April 2008 letter is reproduced in Appendix IV.

Views of the Board

The Board is satisfied that the proposed Cushing Expansion Project would be designed, constructed and operated in accordance with the NEB Act, OPR-99, CSA Z662-07 and other applicable standards, specifications and codes. However, the Board notes that there is conflicting evidence on the record as to the size of sump tank required for the pump stations approved in OH-1-2007. As the Board is unable to determine whether the smaller sump tanks approved in OH-1-2007 would be appropriate within the context of the Cushing Expansion Project, the Board will recommend that an amending Certificate be conditioned to require Keystone to file with the Board for approval, a report that verifies the sump tank is adequately sized for its intended use⁹.

To help ensure the safe construction and operation of the proposed Cushing Expansion Project, the Board will condition Keystone to submit a Construction Safety Manual¹⁰ and an updated Emergency Procedures Manual¹¹. Keystone will also be required to submit a construction schedule to facilitate potential Board inspections¹², as well as maintain at each construction site a copy of the welding and non-destructive testing procedures¹³.

The Board is aware that the increase in flow rate for the Cushing Expansion will change the cyclic loading conditions on the Keystone pipeline, and that Line 100-1 may contain corrosion fatigue sensitive features which could grow when subjected to large pressure cycles. The Board notes Keystone's commitment to conduct the in-line inspections considering the corrosion fatigue flaws at the higher flow rate. The Board also notes Keystone's commitment to update the engineering assessment for Line 100-1 to include the Cushing Expansion facilities. The Board has included Keystone's commitment in this regard as a condition¹⁴.

With respect to leave to open requirements, the Board does not exempt any of the facilities applied for pursuant to section 58 from the provisions of paragraph 30(1)(b) and section 47 of the NEB Act¹⁵. Keystone shall apply for leave to open the proposed facilities prior to commencing operation. The facilities applied for pursuant to section 21 of the NEB Act shall be subject to the leave to open requirements of Certificate OC-51.

9 Appendix VIII condition 15

10 Appendix VII condition 6, and Appendix VIII condition 6

11 Appendix VII condition 16, and Appendix VIII condition 16

12 Appendix VII condition 4, and Appendix VIII condition 4

13 Appendix VII condition 12, and Appendix VIII condition 11

14 Appendix VII condition 15 and Appendix VIII condition 14

15 The text of paragraph 30(1)(b) and section 47 is reproduced in Appendix II.

Chapter 5

Land Matters

The Board expects companies to provide a description and rationale for both permanent and temporary lands that will be required for a project in order to assess the extent of new lands to be affected by a project. In addition, companies are required to advise the Board if they are using any of their existing land rights, or if there are areas where only temporary land rights are required.

The Board also requires a description of the land acquisition process as well as the status of acquisition activities. Pursuant to the NEB's *Filing Manual*, companies provide the Board with a copy of the sample notices provided to landowners under subsection 87(1) of the NEB Act¹⁶ as well as copies of sample acquisition forms.

For facilities applications filed pursuant to section 52 of the NEB Act, if the Board and the Governor in Council approve the project, the pipeline company must submit to the Board prior to construction, a plan, profile and book of reference (PPBoR) which lays out the proposed detailed route of a pipeline segment for consideration by the Board through the PPBoR process. The PPBoR process allows landowners and other persons to examine the PPBoR to determine the precise location of the proposed detailed route, the lands that will be crossed, the type of land rights that will be required and the landowners who will be affected. In the PPBoR process the Board considers any objections with respect to the detailed route and method and timing of construction of the pipeline before making its decision on the detailed route.

In an application for facilities pursuant to section 58 of the NEB Act, a company may request exemption from the sections of the NEB Act pertaining to the PPBoR process and it is the Board's responsibility to determine whether it would be in the public interest to grant the requested relief.

5.1 Land Rights and the Acquisition Process

The Cushing Expansion Project includes the construction of seven new pump stations pursuant to section 58 of the Act to be located at points along the existing TransCanada Line 100-1, and the relocation of three pump stations pursuant to section 21 of the Act as a variance to Keystone's Certificate OC-51. Details of these pump station sites are provided in Table 4-1. Their geographic locations are shown in Figure 4-1 in Chapter 4 of these Reasons.

Keystone submitted that all construction activities would occur on privately-owned lands. In its Application, Keystone stated that it proposed to acquire the new lands for all of the Cushing Expansion facilities by fee simple purchase agreement. As the proposed pump stations would vary in size and capacity, the associated land areas required vary from 1.60 hectares to 3.38 hectares per site.

¹⁶ The text of subsection 87(1) is reproduced in Appendix II.

Keystone stated that land acquisition activities had begun prior to the filing of its Application in November 2007. It submitted in its Application that it would comply with the provisions of the NEB Act. Keystone provided a sample copy of the section 87(1) notice and confirmed that the NEB publication "Pipeline Regulation in Canada: A Guide for Landowners and the Public" would be provided to landowners along with a map showing the project's location relevant to the landowner's property. Prior to the hearing, Keystone confirmed that as of 4 April 2008, all lands for the seven pump stations that had been applied for pursuant to section 58 of the NEB Act had been acquired.

5.2 PPBoR Process

Following issuance of Certificate OC-51 for the Keystone Pipeline Project, Keystone filed its PPBoRs for the pipeline and the pump stations related to that application. These PPBoRs included the three pump stations applied for under section 21 of the NEB Act in the Cushing Expansion Project Application, shown in the proposed varied locations.

For the seven proposed new pump stations, Keystone requested that the Board issue an Order pursuant to section 58 of the NEB Act, exempting the company from the provisions of sections 30 through 32 of the Act¹⁷. Subsections 31(c) and (d) and section 32 pertain to the PPBoR process. During the proceeding, Keystone confirmed that all lands for the seven pump stations under the section 58 application had been acquired and that there were no outstanding concerns to be addressed.

Views of the Board

The Board notes that Keystone has submitted that the lands rights for the seven pump stations applied for pursuant to section 58 of the NEB Act have been acquired and that there are no outstanding concerns. The Board has examined the sample land acquisition documents and finds that they are generally consistent with the obligations of the company referenced in the NEB Act. Therefore, the Board is satisfied that the acquisition process is acceptable.

When making its decision on whether to grant a request for relief from the provisions of the NEB Act regarding the PPBoR process, the Board assesses the entire application and related evidence, while bearing in mind the rights of landowners and other parties who may be affected by the proposed project. Considering the evidence submitted and the above conclusions, the Board finds that it is reasonable to grant Keystone an exemption from the PPBoR process, pursuant to section 58 of the NEB Act, in respect of the seven new pump stations.

The Board notes that the new locations of the remaining three pump stations were applied for pursuant to section 21 of the NEB Act. These pump stations remain subject to the PPBoR requirements under Certificate OC-51 issued in respect of the Keystone Pipeline.

¹⁷ The text of sections 30 to 32 is reproduced in Appendix II.

Chapter 6

Consultation

The NEB promotes the undertaking by regulated companies of an appropriate level of public involvement, commensurate with the setting and the nature and magnitude of each project. This recognizes that public involvement is a fundamental component during each phase in the lifecycle of a project (i.e.: project design, construction, operation and maintenance, and abandonment) in order to address potential impacts. In assessing the adequacy of consultation in respect of an application, the Board considers, among other things, whether the consultation program establishes a direct communications link between the company and those who may be impacted by the project, and provides a means by which questions and concerns raised by parties can be considered and addressed.

This chapter addresses the public and Aboriginal consultation program that was undertaken for the Cushing Expansion Project.

6.1 Public Consultation

In its application, Keystone stated that for the Cushing Expansion Project, it had adopted TransCanada's consultation practice, which is to develop and adapt consultation programs according to the nature, location and effects of its projects on relevant stakeholders.

In the case of the Cushing Expansion Project, Keystone considered that impacts would vary according to the different segments of the proposed pipeline. Therefore, the consultation program was adapted for the new pump stations proposed for Saskatchewan and Manitoba and for the addition of pumping units at approved facilities. Keystone stated that its consultation program also considered stakeholders' familiarity with TransCanada and its pipeline operations, and their knowledge about pipelines, associated facilities and the oil and gas industry.

Keystone stated that it initiated its consultation with stakeholders on the Cushing Expansion Project in July 2007 and its consultation program involved a range of activities including meetings and phone calls with landowners, meetings with interest groups and government officials, public notices, mail-outs (Project information package), a toll-free number and news releases. Stakeholder groups included landowners, rural municipalities and towns/villages, community stakeholders, Aboriginal groups, regulatory agencies and special interest groups.

In its Application, Keystone stated that no issues of concern were raised by stakeholders and most questions or concerns have either been resolved or will be resolved prior to construction. Keystone added that consultation will continue through the construction phase and into operations when stakeholder engagement will transition from the Keystone project team into TransCanada's ongoing community relations program, including the Integrated Public Awareness Program.

Views of Parties

Hadwin Cattle Co. Ltd. (Hadwin)

Hadwin (a member of AAPL) filed a letter expressing concern about the environmental impacts of the Cushing Expansion Project and the adequacy of Keystone's landowner consultation program. Hadwin's submissions related primarily to the impact that the noise associated with the increase in pump units would have on its commercial operations. It stated that it had had positive discussion about the noise issue with the Applicant and that it hoped to reach a mutually beneficial solution soon. Hadwin also alleged that Keystone had not disclosed its intention to construct sump tanks at the pump station located in proximity to Hadwin's operations. Although Hadwin had since received satisfactory information regarding the placement underground, the leak detection system and the interstitial gap of the sump tank, it still sought more information regarding the size of the tank.

AAPL

AAPL submitted that Keystone had not fulfilled its commitments to resolve the outstanding landowner issues and concerns raised during the Keystone Pipeline OH-1-2007 proceeding nor complied with the conditions attached to the Keystone Pipeline OH-1-2007 Certificate. AAPL also submitted that there were deficiencies in Keystone's consultation process for the Cushing Expansion Project as Keystone did not disclose the identified risks to the affected landowners such that AAPL and its members might be informed and in a position to identify their concerns. AAPL also submitted that they did not have sufficient capacity to identify and interpret the possible risks of the Cushing Expansion Project.

Views of Keystone

Keystone stated that its stakeholder consultation program was based on TransCanada's long-standing commitment to stakeholder and public engagement.

In response to the comments from Hadwin, Keystone submitted that it had met with Hadwin and had provided information and explanations to address the concerns and issues expressed.

Keystone argued that AAPL's concerns about possible risks associated with the Cushing Expansion Project were in part premised upon a misapprehension of a "proposed increase in pressure" in the Keystone pipeline. Keystone submitted that it is not proposing to increase the maximum operating pressure (MOP) for which the Keystone Pipeline has been designed. Rather, the slight increase in average pressure flows would remain well within the allowed MOP.

In response to AAPL's concerns about increase in noise from the Cushing Expansion Project, Keystone stated that an increase in pump size at the approved facilities would not result in an increase in noise. Keystone further stated that it would have a detailed comprehensive noise assessment performed on all pump stations in Canada in order to identify areas which may require further or additional mitigation. Keystone stated that it had discussed and will continue to address potential noise impacts with any landowner who has identified the issue as a concern.

Keystone countered AAPL's allegations of deficiencies in Keystone's consultation process, by stating that it had consulted with AAPL and its individual members using multi-layers of communication material depending on whether the landowners were directly affected or showed interest in the Cushing Expansion Project. In response to Board counsel's question as to why there had been no mention of consultation with AAPL in the application, and why Keystone's consultation updates to the Board did not mention Keystone's engagement with AAPL, Keystone stated that it had consulted with AAPL's individual members and had initiated consultation with AAPL after it became an organization in November 2007. Keystone however recognized its oversight in failing to provide details of meetings it had with AAPL in its pre-hearing filings with the Board.

Keystone submitted that it intends to maintain an active level of engagement with all potentially affected stakeholders and to continue to address any issues that may arise, particularly during the construction phase of the Cushing Expansion Project.

6.2 Aboriginal Consultation

In its Application, Keystone submitted that it had consulted with Aboriginal communities that could potentially be affected by the Cushing Expansion Project and that its Aboriginal consultation program was guided by TransCanada's Aboriginal Policy.

Keystone stated that it had consulted with Carry the Kettle First Nation, Siksika First Nation and members of the Dakota Nations of Manitoba. In Saskatchewan, it had contacted the Treaty 4 First Nations in compliance with a protocol agreement developed in 2000 with TransCanada, and in Manitoba, Keystone met with the Treaty One organization. Keystone submitted that it had requested to meet with Standing Buffalo Dakota First Nation in order to provide project information and had not received a response to its request.

Keystone stated that it became aware of the Métis Nation - Saskatchewan (MNS) after its intervention was filed. Keystone subsequently initiated consultation with MNS.

In its Application, Keystone stated that the Cushing Expansion Project would be primarily on privately owned lands under intensive agricultural use. Keystone added that there were no Aboriginal communities identified near the proposed pump stations that could potentially be affected by the Cushing Expansion Project. To identify any potential adverse affects to traditional Aboriginal uses of the land, Keystone had engaged the services of Elders from Carry the Kettle First Nation in Saskatchewan and the Dakota Ojibway Tribal Council and Manitoba Métis Federation in Manitoba, to tour the sites. Keystone also stated that no significant concerns were expressed by these organizations in relation to the proposed project.

Views of Parties

MNS

Through its questions at the oral part of the hearing, MNS highlighted Keystone's failure to identify MNS as an interested stakeholder, contact MNS representatives and provide project information to MNS at the outset of the company's consultation program.

In its final argument, MNS requested that the Board consider adding the following condition to any approval that may be granted:

Keystone shall, on or about 30 days prior to construction, file with the Board an update on its consultation with the Métis Nation of Saskatchewan, including but not limited to:

- Provide a list of issues raised by MNS; and
- For approval, a summary indicating how Keystone will address any concerns raised during the consultation.

They argued that imposing such a condition would ensure the fulfillment of MNS' consultation expectations.

Views of Keystone

With respect to its failure to identify MNS early in the process, Keystone stated that as soon as it became aware of MNS's interest in the Cushing Expansion Project, it immediately initiated contact in order to facilitate a meeting. Keystone submitted that it had only recently started to meet with MNS and was trying to better understand the political structure and organization of MNS and that it was now seeking to understand its needs.

In response to Board counsel's question as to why Keystone had not informed the Board about its consultation activities with MNS and why there was no mention of the consultation activities in its updates to the consultation tracking tables filed with the Board, Keystone admitted that it was an oversight and committed to provide a written summary of its consultation efforts with MNS.

Keystone also committed to work with MNS to find solutions to outstanding concerns that might be agreeable to both parties, and further stated that it is willing and committed to ongoing communication with MNS. Keystone stated that its ongoing consultation with Aboriginal communities is aimed at establishing long term relationships extending beyond the scope and the timing of the Cushing Expansion Project.

Views of the Board

The Board finds that the design of the consultation program undertaken by Keystone for the Cushing Expansion Project was adequate and that Keystone provided most stakeholders with information about the proposed expansion and its potential impacts. However, the Board is of the view that certain aspects of Keystone's consultation program, such as early identification of all potentially affected stakeholders and the mechanisms used to respond to concerns expressed, could have been improved to be more comprehensive. The Board is also of the view that although Keystone provided adequate information to stakeholders such as landowners, it could have provided such information in a form more responsive to the specific concerns raised.

The Board finds Keystone's consultation pertaining to the possible increases in noise to be adequate¹⁸. The Board expects that Keystone will include stakeholders who are potentially affected by noise in its future consultations. To that end, Keystone is directed to inform those, such as Hadwin and other AAPL members, who are potentially affected about the results of the comprehensive noise assessment undertaken by the company¹⁹. If concerns about noise persist, stakeholders could avail themselves of the Board's Landowner Complaint Resolution Procedure.

The Board notes that Keystone did not identify MNS early in the consultation process. The Board expects companies to be diligent in their efforts to identify and notify potentially affected parties. The Board is of the view that early identification of all potentially affected stakeholders will improve the design of the consultation program and make it more comprehensive. The Board encourages Keystone to take steps to ensure that future consultation activities involve diligent efforts to identify all potentially affected people at the outset.

The Board notes Keystone's commitment to address concerns raised during ongoing consultation activities and its interest in developing agreements with Aboriginal groups in the project area. The Board supports the development of such arrangements and encourages all project proponents to build relationships with Aboriginal groups with interests in the area of their projects. The Board has considered the request of MNS for a condition in this respect. The Board has determined that it is more appropriate to impose a condition on Keystone that would require it to provide an update to the Board of its consultation activities with all potentially affected persons and groups, including an explanation of how concerns have or will be addressed.²⁰

The Board considers company consultation programs to be an essential component of good project design. The Board recognizes that public involvement is a fundamental component during each phase in the lifecycle of a project, and reminds all Parties of the importance of establishing and maintaining good relationships through open communication to address potential impacts throughout the entire life of a project.

The Board reminds Keystone that the information regarding the outcomes of its consultation is a factor in the Board's decision in the public interest as it provides views from stakeholders about the affects that the project may have on them. The Board expects Keystone to provide details of the outcomes of its consultation activities and all relevant updates to the Board in a timely manner during a Board proceeding.

18 The technical aspects of the Board's views on noise mitigation are discussed in the Environmental Screening Report in Appendix VI.

19 Appendix VII condition 11, and Appendix VIII condition 10

20 Appendix VII condition 8 and Appendix VIII condition 7

Chapter 7

Environment and Socio-Economic Matters

The Board considers environmental and socio-economic matters under both the *Canadian Environmental Assessment Act* (CEA Act) and the NEB Act. The Board expects applicants to identify and consider the effects a project may have on bio-physical and socio-economic elements, the mitigation to reduce those effects, and the significance of any residual effects once the mitigation has been applied.

This chapter provides a description of the environmental assessment process used by the NEB for the Cushing Expansion Project. It also addresses the socio-economic issues that are not evaluated in the CEA Act environmental screening report (ESR).

7.1 Environmental Screening Process

The Cushing Expansion Project would require an Order pursuant to subsection 58(1) of the NEB Act and thus, triggers the requirement for an environmental assessment under the CEA Act. In addition, an amendment to Certificate OC-51, made pursuant to subsection 21(1) of the NEB Act would be required. Since the Cushing Expansion Project would not require more than 75 km of new Right of Way, as defined in the CEA Act *Comprehensive Study List Regulations*, the Cushing Expansion Project was subjected to a screening level of environmental assessment under the CEA Act.

Following the oral portion of the hearing, the Board issued a draft ESR on 1 May 2008 for public review and comment. The Board received no comments from the public regarding the ESR.

The ESR reflects parties' comments and the Board's assessment of the bio-physical and socio-economic effects of the Cushing Expansion Project and mitigation measures based on the project description, factors to be considered, and the scope of those factors. The ESR also includes recommendations for conditions to be included in any Board regulatory approvals.

All known environmental and socio-economic effects covered by the CEA Act are assessed in the ESR.

Views of the Board

With respect to its regulatory decision under the NEB Act, the Board has considered the CEA Act ESR and the recommendations included therein.

The Board determined in the ESR that, with the implementation of Keystone's environmental protection procedures and mitigation measures and the Board's recommendations, the proposed Cushing Expansion Project is not likely to cause significant adverse environmental effects. In the event that the Cushing Expansion Project is approved, the Board would convert the recommendations contained in the ESR, into conditions of its approval.

For details regarding the Board's assessment of the environmental and socio-economic effects evaluated pursuant the CEA Act, the reader is referred to the ESR. The ESR is included in the Reasons for the Decision as Appendix VI. Copies of the ESR are also available in the NEB library or on-line within the Board's Regulatory Documents at www.neb-one.gc.ca.

7.2 Socio-Economic Matters Considered Under the NEB Act

The Board expects companies to identify and consider the impacts a project may have on socio-economic conditions including the mitigation of negative impacts and the enhancement of project benefits.

Potential socio-economic effects covered by the CEA Act are included in the ESR. The CEA Act contemplates indirect socio-economic effects caused by a change to the environment as a result of the project. Direct socio-economic effects caused by the existence of the Cushing Expansion Project itself are assessed under the NEB Act and are discussed below.

Impact on Employment

In its Application, Keystone stated that total direct and indirect construction employment will amount to approximately 4,693 person-months of employment and an estimated \$49.3 million in wages and salaries. It further stated that there will be no increase in employment opportunities beyond those created by the operation of the Keystone Pipeline Project OH-1-2007.

Views of Parties

AFL

AFL raised concerns that the Cushing Expansion Project would result in lost job opportunities in the upgrading, refining and secondary industries unless the bitumen is upgraded domestically prior to export. AFL maintained that the expansion would not create even one additional permanent operating or maintenance job. AFL submitted that the Cushing Expansion Project will have negative impacts on Canadian jobs.

Views of Keystone

In response to the comments from AFL, Keystone stated that its socio-economic study only focused on the applied-for facilities. Keystone further stated that the study of number of jobs required to produce the oil or how many jobs are required in the refineries to refine the oil is beyond the scope of the socio-economic assessment required for the Cushing Expansion Project.

Views of the Board

From a socio-economic perspective, the Board finds that the Cushing Expansion Project will have a positive impact on employment during construction. As to AFL's concerns with respect to foregone job opportunities in the refining and upgrading industries, the Board's views on this matter are given in Chapter 3 of these Reasons.

Chapter 8

Conclusion and Disposition

Having considered and weighed all of the evidence before it, the Board is satisfied that it is in the public interest to approve the Cushing Expansion Project.

The Board exempts Keystone from the provisions of paragraph 30(1)(a) and sections 31 and 32 of the NEB Act for the facilities applied for pursuant to section 58, and has issued Order XO-T241-07-2008, the effect of which is to approve the construction and operation of these new facilities. A copy of this Order, including the attached conditions, is included as Appendix VII.

With respect to the facilities applied for pursuant to section 21, the Board will recommend to the Governor in Council that Certificate OC-51 be amended to allow the variance requested by Keystone pursuant to certain conditions. These conditions are listed in Appendix VIII. The conditions attached to Certificate OC-51 shall remain in force for all facilities approved in OH-1-2007 and also apply, as appropriate, to those facilities approved pursuant to section 21 in the OH-1-2008 proceeding. For reference, the conditions attached to Certificate OC-51 are listed in Appendix IX.

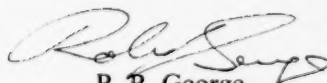
The Board has also considered Keystone's proposed toll methodology in light of the requirements of Part IV of the NEB Act and found it to be just and reasonable and not unjustly discriminatory. Keystone shall abide by the directions set out by the Board in Chapter 3.

The foregoing constitutes our Reasons for Decision in respect of the application considered by the Board in the OH-1-2008 proceeding.



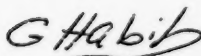
S. Leggett

Presiding Member



R. R. George

Member



G. Habib

G. Habib
Member

Calgary, Alberta
July 2008

Appendix I

List of Issues

The Board identified but did not limit itself to the following issues for discussion in the OH-1-2008 proceeding:

1. The need for the proposed new facilities and proposed modifications to facilities approved in OH-1-2007 (modifications).
2. The economic feasibility of the proposed new facilities and modifications.
3. The potential commercial impacts of the proposed project.
4. The potential environmental and socio-economic effects of the proposed new facilities and modifications, including those factors outlined in subsection 16(1) of the Canadian Environmental Assessment Act.
5. The adequacy of Keystone's consultation process with respect to the proposed new facilities and modifications.
6. The suitability of the design, construction and operation of the proposed new facilities and modifications.
7. The appropriateness of the toll methodology and proposed tariff.
8. The terms and conditions to be included in any approval the Board may issue.

Appendix II

Relevant Sections of the Act

21. (1) Subject to subsection (2), the Board may review, vary or rescind any decision or order made by it or rehear any application before deciding it.

(2) The Board may vary a certificate, licence or permit but the variation of a certificate or licence is not effective until approved by the Governor in Council.

(...)

30. (1) No company shall operate a pipeline unless

(a) there is a certificate in force with respect to that pipeline; and

(b) leave has been given under this Part to the company to open the pipeline

(2) No company shall operate a pipeline otherwise than in accordance with the terms and conditions of the certificate issued with respect thereto.

31. Except as otherwise provided in this Act, no company shall begin the construction of a section or part of a pipeline unless

(a) the Board has by the issue of a certificate granted the company leave to construct the line;

(b) the company has complied with all applicable terms and conditions to which the certificate is subject;

(c) the plan, profile and book of reference of the section or part of the proposed line have been approved by the Board; and

(d) copies of the plan, profile and book of reference so approved, duly certified as such by the Secretary, have been deposited in the offices of the registrars of deeds for the districts or counties through which the section or part of the pipeline is to pass.

32. (1) On an application for a certificate, the company shall file with the Board a map in such detail as the Board may require showing the general location of the proposed line and such plans, specifications and information as the Board may require.

(2) The company shall file a copy of the application and of the map referred to in subsection (1) with the attorney general of each province to which the application relates in whole or in part, and the Board shall require notice of the application to be given by publication in newspapers or otherwise.

(...)

47. (1) No pipeline and no section of a pipeline shall be opened for the transmission of hydrocarbons or any other commodity by a company until leave to do so has been obtained from the Board.

(2) Leave may be granted by the Board under this section if the Board is satisfied that the pipeline may safely be opened for transmission.

(...)

58. (1) The Board may make orders exempting

(a) pipelines or branches of or extensions to pipelines, not exceeding in any case forty kilometres in length, and

(b) any tanks, reservoirs, storage facilities, pumps, racks, compressors, loading facilities, interstation systems of communication by telephone, telegraph or radio, and real and personal property, or immovable and movable, and works connected to them, that the Board considers proper,

from any or all of the provisions of sections 29 to 33 and 47.

(3) In any order made under this section the Board may impose such terms and conditions as it considers proper.

(...)

62. All tolls shall be just and reasonable, and shall always, under substantially similar circumstances and conditions with respect to all traffic of the same description carried over the same route, be charged equally to all persons at the same rate.

(...)

67. A company shall not make any unjust discrimination in tolls, service or facilities against any person or locality.

(...)

71. (1) Subject to such exemptions, conditions or regulations as the Board may prescribe, a company operating a pipeline for the transmission of oil shall, according to its powers, without delay and with due care and diligence, receive, transport and deliver all oil offered for transmission by means of its pipeline.

(...)

87. (1) When a company has determined the lands that may be required for the purposes of a section or part of a pipeline, the company shall serve a notice on all owners of the lands, in so far as they can be ascertained, which notice shall set out or be accompanied by

- (a) a description of the lands of the owner that are required by the company for that section or part;
- (b) details of the compensation offered by the company for the lands required;
- (c) a detailed statement made by the company of the value of the lands required in respect of which compensation is offered;
- (d) a description of the procedure for approval of the detailed route of the pipeline; and
- (e) a description of the procedure available for negotiation and arbitration under this Part in the event that the owner of the lands and the company are unable to agree on any matter respecting the compensation payable.

Appendix III

Board Ruling on AAPL Motion

Files OF-Fac-Oil-T241-2007-01 01
OF-Fac-Oil-T241-2006-01 02
28 March 2008

Mr. Paul Vogel
Counsel to the Alberta Association of
Pipeline Landowners (AAPL)
Cohen Highley LLP
11 – 255 Queens Avenue
London, ON N6A 5R8
Facsimile 519-672-5960

Dear Mr. Vogel:

**OH-1-2008 Proceeding regarding
TransCanada Keystone Pipeline GP Ltd. (Keystone)
Cushing Expansion Application
Notice of Motion of the Alberta Association of Pipeline Landowners (AAPL)**

The National Energy Board is in receipt of a notice of motion from the AAPL dated 27 March 2008. The motion seeks an order of the Board directing:

- (a) The issue of Keystone's consultation failures and consequences for the current certificate approval be addressed and determined by the Board at the detailed route hearings still to be scheduled; and
- (b) That in the interim until such resolution, the Board not determine or approve the amendments sought by Keystone to its Keystone Pipeline Certificate of Public Convenience and Necessity.

Parties are referred to the notice of motion and the written evidence of the AAPL, also filed with the Board on 27 March 2008 and relied upon in support of the motion, for further particulars thereof.

The requested relief is based on the assertion of the AAPL that Keystone's failure to resolve outstanding landowner issues related to the Keystone Pipeline constitutes a failure by Keystone to comply with conditions of Certificate OC-51, approving of the Keystone Pipeline project.

The Board rejects the suggestion that a failure by Keystone to fulfill conditions to Certificate OC-51, even if established, is cause for the Board to discontinue its consideration of Keystone's Cushing Expansion application. If Keystone has failed to thus far satisfy conditions to Certificate OC-51, which has not been established, the relevance of that potential failure to any terms and conditions to be imposed by the Board in relation to the Cushing Expansion application is a matter that is properly the subject of evidence and argument at the Cushing Expansion proceeding.

Furthermore, in setting the Cushing Expansion application down for hearing, the Board considered that the application disclosed sufficient information regarding landowner consultation and potential impacts of the proposed Cushing Expansion facilities on landowners to permit the matter to proceed to hearing. However, the Board has yet to determine the adequacy of consultation, the potential impacts on landowners or appropriate mitigation of any such impacts that may be associated with the Cushing Expansion facilities.

As the Board noted in its correspondence of 1 February 2008 regarding hearing issues, and as reflected in the OH-1-2008 List of Issues, it is open to any party to make submissions regarding both the adequacy of consultation for the Cushing Expansion project, and the appropriate terms and conditions that might be imposed on any authorization of the Cushing Expansion facilities (see Issues 5 and 8 of the OH-1-2008 List of Issues).

The Board therefore denies the AAPL's request that the Board delay further consideration of the Cushing Expansion application. Accordingly, the OH-1-2008 hearing will commence, as scheduled, in Oyen, Alberta, on 8 April 2008.

Notwithstanding the above ruling, the Board is mindful of the AAPL's concern with respect to the status of Keystone's compliance with conditions of Certificate OC-51. On the request of the AAPL, the Board would be prepared to consider whether it ought to inquire and make determinations regarding the status of Keystone's compliance with conditions of Certificate OC-51, as they may pertain to landowner consultation commitments of Keystone. Any such request should be filed with the Board and accompanied by supporting documentation and rationale. Thereafter, the Board would be in a position to solicit comment from Keystone and other interested parties. Following review of such submissions, the Board could determine whether any such inquiry is appropriate, and what form it might take.

In respect of the AAPL's request that the Board order that the issue of Keystone's compliance with conditions of Certificate OC-51 be addressed by the Board at detailed route hearings, the Board notes that at present, no detailed route hearings have been ordered in respect of the Keystone project. Further, the purpose of detailed route hearings is to establish the best possible detailed route of a pipeline and the most appropriate methods and timing of constructing the pipeline. While certain concerns of the AAPL might fall within the scope of a detailed route hearing, the Board will not at this time presuppose what portions of the proposed detailed route might be subject to valid detailed route objection, the issues that might be raised by landowners, and the manner in which any detailed route proceedings might be conducted.

The Board notes the suggestion in the AAPL notice of motion and filed written evidence that, due to financial resource limitations, the association no longer intends to participate in the Cushing Expansion proceeding. The Board selected the hearing location based on the input of the AAPL in respect of the location that would be most convenient for its participation. The Board welcomes and is prepared to facilitate hearing participation by all interested persons. To that end the Board is willing to make facilities available to permit cross-examination of the applicant's witnesses and delivery of oral argument by teleconference, if that is desired. The Board is also able to make arrangements for the receipt of written argument from the AAPL.

Notwithstanding its expressed intention to not participate in the OH-1-2008 proceeding, the AAPL has nevertheless filed written evidence in respect of that proceeding. The Board's procedural rules require that a party filing written evidence at an oral hearing must be prepared to make a witness available at the hearing location to adopt and be examined with respect to that evidence. Failure to present a witness may result in the evidence not being accepted on the record. The Board seeks clarification regarding the AAPL's intentions in respect of its filed written evidence. To that end the AAPL is directed to contact the Board's counsel, Ms. Julie Fisk, at 403-299-2716 or toll free at 1-800-899-1265, to indicate whether it will present a witness at the scheduled hearing to adopt and speak to the AAPL's filed evidence. In the event counsel to the AAPL is not able to attend the proceeding, the Board is prepared to have its own counsel assist an AAPL witness with respect to procedural matters related to the formal adoption of the AAPL evidence at the hearing.

Yours truly,



for
Claudine Dutil-Berry
Secretary of the Board

cc: Parties to the OH-1-2008 Proceeding

Appendix IV

Board Ruling on Keystone's Request to Release the Decision with Reasons to Follow

Files OF-Fac-Oil-T241-2007-01 01
OF-Fac-Oil-T241-2006-01 02

30 April 2008

Mr. Ian Cameron
Regulatory Project Manager Associate
TransCanada PipeLines Limited
450 First Street S.W.
Calgary, AB T2P 5H1
Facsimile 403-920-2391

Ms. Wendy Moreland
Stikeman Elliott LLP
4300 Bankers Hall West
888 Third Street S.W.
Calgary, AB T2P 5C5
Facsimile 403-266-8034

Dear Mr. Cameron and Ms. Moreland:

**Hearing Order OH-1-2008 regarding
TransCanada Keystone Pipeline GP Limited (Keystone)
Keystone Cushing Expansion Application**

In final argument, Keystone requested a decision as soon as is feasible and asked that the Board consider issuing a decision in the OH-1-2008 proceeding with reasons to follow. Keystone asked for this relief in order to reduce potential costs and maximize environmental benefits of co-construction with Keystone Pipeline facilities.

Although the Board has not yet decided on the substance of this application, in considering Keystone's request, the Board has assessed what time economies might be realized if it was inclined to approve construction and operation of the applied-for facilities and if it were to issue a decision to that effect with reasons to follow.

With respect to the application made pursuant to section 21 of the *National Energy Board Act* (NEB Act), the Board concludes that issuing a decision approving the variances with reasons to follow would be unlikely to assist in maintaining Keystone's construction schedule since the NEB Act provides that Board Orders varying Certificates are not effective until approved by the Governor in Council. With respect to the facilities applied for pursuant to section 58 of the NEB Act, the Board notes that other assessments (including an assessment pursuant to the *Canadian Environmental Assessment Act*) are also required before a Board Order can be issued.

In the circumstances before it, the Board is of the view that the time needed to fulfill legislative requirements applicable to the Orders sought, lessen the discernible benefits that issuing a decision first with reasons to follow seems to have, particularly when measured against the

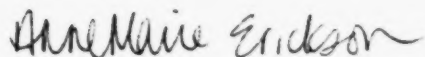
Board's usual 12 week standard (80 per cent of the time) for the delivery of complete Reasons for Decision.

In counterpoint to Keystone's interests in obtaining a decision with reasons to follow, the Board has also considered whether this would cause prejudice to other hearing participants as well as to the general public interest. In this case, the Board is of the view that issuing a decision without accompanying reasons could lead to a situation where intervenors would be unaware of the basis upon which the decision was issued and would therefore not have an appreciation of the manner in which their submissions influenced the decision until the reasons were issued.

The Board is also mindful that issuing Reasons for Decision at some time following the issuance of the decision would mean that the Board's reasoning underlying the imposition of conditions would not be immediately available. This may not only impact intervenors' interests, but may also affect the applicant, who would have no context to guide it in complying with the conditions when it commences construction.

After balancing the interests of all parties to the proceeding, including having regard for the overall public interest, the Board sees no compelling reason to issue a decision prior to its reasons and concludes that the benefits that might be derived from issuing a decision with respect to the Cushing Expansion Application with reasons to follow are outweighed by the detriments. Accordingly, the Board declines to grant the relief sought by Keystone.

Yours truly,

A handwritten signature in cursive script, reading "AnneMarie Erickson".

for Claudine Dutil-Berry
Secretary of the Board

Appendix V

Board Ruling on the Filing of CAPP's Argument

Files OF-Fac-Oil-T241-2007-01 01
OF-Fac-Oil-T241-2006-01 02

23 May 2008

Mr. Lewis Manning
Lawson Lundell LLP
3700, 205 – 5th Avenue SW
Bow Valley Square 2
Calgary, AB T2P 2V7
Facsimile 403-269-9494

Dear Mr. Lewis:

**Hearing Order OH-1-2008 regarding
TransCanada Keystone Pipeline GP Limited (Keystone)
Keystone Cushing Expansion Application**

Counsel on behalf of the Canadian Association of Petroleum Producers (CAPP) filed written argument with the National Energy Board in the above-referenced proceeding on 23 April 2008, two days after the deadline that the Board had established for the filing of such argument. By letter dated 28 April 2008, the Board requested CAPP to file with the Board and serve on all parties no later than noon Calgary time, on 2 May 2008, submissions addressing why the filing was late and why it should be admitted.

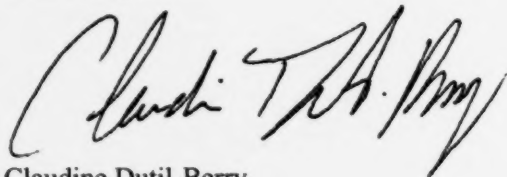
By letter dated 1 May 2008, Counsel on behalf of CAPP explained that the argument had been approved by CAPP and was ready for filing in advance of the deadline set by the Board, but due to counsel's error, the argument was filed two days late. Counsel submitted that at no time was any inappropriate advantage taken in relation to the preparation of argument.

Counsel noted that CAPP is a bona fide interested party in the hearing and submitted that its argument should not be refused based solely on a "solicitor's slip". Counsel further noted that the delay was minimal and that the only party with right of reply was the Applicant, which indicated it had no reply to CAPP's argument. For these reasons, it was argued that there was no prejudice to the Applicant or to any other party.

The Board did not receive any objections from intervenors.

The Board finds that, based on the particular circumstances of this case, there will be little or no prejudice to any party if CAPP's argument is accepted onto the record, and that any prejudice that might result would be outweighed by the prejudice to CAPP, if its argument is not accepted. The Board therefore grants leave for the late filing of CAPP's argument in this proceeding.

Yours truly,

A handwritten signature in black ink, appearing to read "Claudine Dutil-Berry". The signature is fluid and cursive, with the first name "Claudine" being more prominent and the last name "Dutil-Berry" following in a similar style.

Claudine Dutil-Berry
Secretary of the Board

cc: All parties to the OH-1-2008 proceeding

Appendix VI

Environmental Screening Report

National Energy
Board



Office national
de l'énergie

ENVIRONMENTAL SCREENING REPORT Pursuant to the *Canadian Environmental Assessment Act* (CEA Act)

Keystone Cushing Expansion

Applicant Name:	TransCanada Keystone Pipeline GP Ltd		
Application Date:	23 November 2007	CEA Act Registration Date:	20 December 2007
National Energy Board (NEB or Board) File Number:	OE-Fac-Oil-T241-2007-01 01	CEA Registry Number:	07-01-36190
CEA Act Law List Trigger:	<i>National Energy Board Act</i> , subsections 58(1)	CEA Act Determination Date:	23 June 2008

**KEYSTONE PIPELINE PROJECT
CANADIAN SECTION**

Canada

SCREENING SUMMARY

This report represents an Environmental Screening Report (ESR) for the TransCanada Keystone Pipeline GP Ltd. (Keystone) Cushing Expansion Project (the Project).

On 20 September 2007, the National Energy Board (NEB or the Board), as part of its reasons for decision in the OH-1-2007 proceeding, released an Environmental Screening Report that concluded that Keystone's proposal to construct and operate the Canadian portion of the Keystone Pipeline and related facilities was not likely to cause significant adverse environmental effects. The Governor in Council approved the issuance of Certificate of Public Convenience and Necessity OC-51 on 22 November 2007. On 23 November 2007, Keystone applied to the NEB for approval of variances to the Keystone Pipeline and for approval for the construction and operation of additional oil transmission facilities for the original Project.

The Project would require the installation of seven new pump stations, the addition of pumping units at thirteen of the pump stations approved by Certificate OC-51, an increase in pump motor size at seven of the pump stations approved by Certificate OC-51 and modifications to approved and new associated piping and facilities.

In addition, Keystone would relocate three of the pump stations approved by Certificate OC-51.

The analysis for this ESR is based on Keystone's application and responses to information requests, the Environmental Protection Plan (EPP), letters of comment, and evidence submitted at the public hearing.

The Board is of the view that for this Project, if Keystone follows the standard design and mitigative measures included within the application (including the appendices), its commitments during the OH-1-2008 hearing and the Board's recommendations, the potential adverse environmental effects are not likely to be significant.

To view Keystone's Application and the Environmental and Socio-Economic Assessment, please refer to the NEB website at: www.neb-one.gc.ca, click on "Regulatory Documents", and go to "Browse Regulatory Document Index", then go to "Looking for filing? Enter its Id here" and type in filing identification number A17039 and click on "Go!" Filings related to the Application, refer to the following web address: <https://www.neb-one.gc.ca/11-eng/livelink.exe?func=11&objId=495666&objAction=browse&sort=name>

1.0 ENVIRONMENTAL ASSESSMENT PROCESS

On 20 September 2007, the National Energy Board (NEB or the Board), as part of its reasons for decision in the OH-1-2007 proceeding, released an Environmental Screening Report that concluded that Keystone's proposal to construct and operate the Canadian portion of the Keystone Pipeline and related facilities was not likely to cause significant adverse environmental effects. The Governor in Council approved the issuance of Certificate of Public Convenience and Necessity OC-51 on 22 November 2007. On 23 November 2007, Keystone applied to the NEB for approval of variances to the Keystone Pipeline and for approval for the construction and operation of additional oil transmission facilities for the original Project.

The application for the Project was filed pursuant to subsection 58(1) and 21(1), of the *National Energy Board Act* (NEB Act) which triggers the *CEA Act Law List Regulations* thereby requiring the preparation of this Environmental Screening Report (ESR).

2.0 RATIONALE FOR THE PROJECT

The applied-for modifications and new facilities would increase nominal capacity of the Keystone Pipeline from 69 200 m³/d (435,000 bpd) to a total of 94 000 m³/d (591,000 bpd). An open season held by Keystone in early 2007 secured transportation agreements to justify the extension of the Keystone Pipeline in the United States to Cushing, Oklahoma. The proposed expansion in Canada would accommodate the volumes to be transported to Cushing in addition to those underpinning the facilities approved in NEB Certificate OC-51.

3.0 DESCRIPTION OF THE PROJECT

Physical Work and/or Activity
<i>Construction Phase – Timeframe: Proposed start for Spring 2008 and completion by July 2010</i>
- Construction of seven 200 m² pump stations (totaling fourteen 3000kW pumping units) powered by electricity, installation of associated block valve assemblies, valves, tie-ins, fences plus power lines at facilities in Manitoba and Saskatchewan. - Addition of thirteen 3700 kW and six 3000 kW pumping units at pumping stations approved by OC-51 at four locations in each of Alberta, Manitoba and Saskatchewan. - Increase in motor size of 20 pumping units at seven approved pumping stations in Alberta and Manitoba. - Relocation of three approved pump stations in Alberta (2) and in Manitoba (1).
The Project would also include: - Site preparation (clearing, stripping, stockpiling, grading and trenching). - Upgrading of 2 existing access roads (2 x 800 m). - Hydrostatic testing.
<i>Operation Phase – Timeframe: To be determined</i>
- Operational maintenance and equipment/vehicle operation. - Maintenance of access roads.

Physical Work and/or Activity
▪ The Project would result in an increase to the ambient noise level.
▪ The Project would not result in an increase of local operational air emissions (pumps will use electric power supply).
<i>Abandonment Phase – Timeframe: 30+ years</i>
▪ Pursuant to the NEB Act, an application would be required to abandon the facility, at which time the environmental effects would be assessed by the NEB.

4.0 DESCRIPTION OF THE ENVIRONMENT

Physical Environment

- Five of the proposed pump stations in Saskatchewan (3) and Manitoba (2) would be constructed on land being used for crop production.
- The addition of pumping units at four locations in each of Alberta, Saskatchewan and Manitoba would not require additional land, as they would be installed within the existing station footprint. Therefore, the results of the ESR conducted for the Keystone Pipeline Project would remain unchanged for these facilities, except for the acoustic environment that will be discussed further in this ESR.
- The results of the ESR conducted for the Keystone Pipeline Project remain unchanged for the approved pump stations requiring an increase in motor size for pumping units and, for the three pump stations that would be relocated (Monitor-PS 7, Oyen-PS 8 and Haskett-PS 27), with the exception of the acoustic environment that will be discussed further in this ESR.

Wildlife and Wildlife Habitat

- Native vegetation was identified at two proposed pump stations in Saskatchewan (Chaplin-PS 14 and Whitewood-PS 20).
- There are three wetlands at the proposed Chaplin and Whitewood pump station sites in Saskatchewan. A seasonal pond (class 3 wetland¹) with standing water and substantial emergent vegetation providing potential habitat for birds and amphibians can be found on the northernmost edge of the proposed Whitewood site. The Chaplin site includes: two wetlands, an ephemeral wetland (class 2 wetland¹) with potential habitat for amphibians, and a semi-permanent wetland (class 4 wetland¹) with emergent vegetation and shrub cover providing potential habitat for birds and amphibians.
- There is one Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and 12 *Species at Risk Act* (SARA) listed species potentially occurring in the vicinity of Chaplin and Whitewood proposed pump stations in Saskatchewan. SARA schedule 1

¹ Wetland classes according to Stewart and Kantrud (1971)

species include: four species of special concern (Great Plains Toad, Northern Leopard Frog, Long-Billed Curlew and Yellow Rail), three threatened species (Loggerhead Shrike, Peregrine Falcon and Sprague's Pipit) and three endangered species (Piping Plover, Whooping Crane and Burrowing Owl). SARA schedule 3 species include: Short-Eared Owl (special concern) and Ferruginous Hawk (endangered).

- Among the above mentioned species, the Plains Spadefoot Toad, Ferruginous Hawk and Sprague's Pippit have previously been recorded in the region surrounding the Chaplin and Whitewood pump stations and are believed to have a high potential of occurrence in the surrounding area.
- There are various wildlife restricted activity periods (RAP) for amphibians, reptiles and sensitive bird species in Saskatchewan. These periods occur between April and July.
- There is a migratory bird RAP in Saskatchewan from April 15 to July 31.

Human Occupancy and Land Use

- The Project facilities would be located on lands that are privately owned. In Alberta the sites would be located on farm, ranch and grassland areas. In Saskatchewan and Manitoba the Project facilities would be located on crop lands.

Traditional Land Use

- In Alberta, no Aboriginal communities were identified in the regional study area (RSA).
- In Saskatchewan and Manitoba there are a number of Aboriginal communities within the proposed Project area. In Saskatchewan, Kendal Pump Station (PS 18) is adjacent to the Carry the Kettle First Nation, and in Manitoba, Portage Pump Station (PS 25) is located near the Long Plain First Nation.
- The Métis Nation-Saskatchewan have claimed that Project activities would take place in Métis traditional territory.

Heritage Resources

- There is potential for heritage resources in the Project area.

5.0 COMMENTS FROM THE PUBLIC

5.1 Project-Related Issues Raised in Comments Received by the NEB

Several Project-related issues were raised by the public either to Keystone or directly to the Board. Issues captured by the CEA Act are shown in Table 5.1 below.

Table 5.1: Issues Raised through Consultation

Environmental Element of Interest	Interested Party		
	Government Agencies (federal, provincial, regional, local)	Public: (Individuals, Landowner associations, conservation groups)	Aboriginal Groups
Water & Groundwater		X	
Human Health		X	
Human Occupancy and Resource Use		X	
Heritage Resources			X
Current Traditional Land and Resource Use			X
Cumulative Effects		X	

The Board has considered all comments raised throughout this proceeding. The comments that relate to the Board's CEA Act determination have been considered in the preparation of this ESR. A broader discussion of matters considered under the NEB Act are included in the Board's Reasons for Decision.

5.2 Project-Related Issues Raised in Comments Received by the NEB

No comments have been received by the NEB related to the Environmental Screening Report.

6.0 METHODOLOGY OF THE NEB'S ENVIRONMENTAL ASSESSMENT

Scope of the factors to be considered:

In conducting the ESR, the NEB considered the factors set out in paragraphs 16(1)(a) through (d) of the CEA Act. The scope of the environmental assessment includes the life cycle of the Project within the Project area for those environmental elements listed in Section 7.1. The Scope of the Assessment for this ESR is presented in Appendix 1.

Baseline information and sources:

The analysis for this ESR is based on Keystone's application and responses to information requests, the EPP, letters of comment, and evidence submitted at the public hearing. For more details on how to obtain documents, please contact the Secretary of the NEB at the address specified in Section 10.0 of this report.

Methodology of the analysis:

In assessing the environmental effects of the Project, the NEB used an issue-based approach. In its analysis within Section 7.1, the NEB identified interactions expected to occur between the proposed Project activities and the surrounding environmental elements. Also included were the consideration of potential accidents and malfunctions that may occur due to the Project and any change to the Project that may be caused by the environment. If there were no expected element/Project interactions then no further examination was deemed necessary. Similarly, no

further examination was deemed necessary for interactions that would result in positive or neutral potential effects. In circumstances where a potential effect was identified and the interaction was unknown, it was categorized as a potential adverse environmental effect.

Section 7.2 provides an analysis for all identified potential adverse environmental effects that are normally resolved through the use of standard design or routine mitigation measures. Section 7.3 provides a detailed analysis for each potential adverse environmental effect which is of public concern, involves non-standard mitigation measures or requires the implementation of an issue-specific recommendation. The analysis specifies mitigation measures, ratings for criteria used in evaluating significance as defined in Table 2 monitoring, views of the NEB and any issue-specific recommendations.

Section 7.4 addresses cumulative effects, and Section 7.5 lists recommendations for any subsequent regulatory approvals of the Project.

Table 6.1: Evaluation of Significance Criteria

Criteria	Definition
Frequency	Low: at sporadic intervals during one phase of the Project lifecycle Medium: continuous during one phase of the Project lifecycle High: continuous throughout all phases of the Project lifecycle
Duration	Short term: only during one phase of the Project Medium term: starts in construction and persists through operation Long term: beyond the lifecycle of the Project
Reversibility	Reversible: adverse environmental effect would return to baseline conditions within the life of the Project Irreversible: adverse environmental effect would be permanent, or only reversible beyond the lifecycle of the Project
Biophysical and Socio-Economic Geographic Extent	Project Development Area (PDA): the 30 m RoW and footprints associated with the construction of the pipeline, access roads, and associated facilities such as pump stations. Local Study Area (LSA): includes the PDA as well as a 500 m buffer on either side of the RoW. In some cases, the LSA is only the 30 m RoW. Regional Study Area (RSA): varies with each discipline, and can include such things as natural subregions, the home ranges of wildlife species, or an airshed.
Magnitude	Low: adverse environmental effect would have a negligible influence on physical (e.g. soils and terrain), biophysical (e.g. vegetation, wildlife, fisheries, air quality), or social elements (e.g. human health, traditional land use, heritage resources, ambient noise levels) Medium: adverse environmental effect would have a local influence on physical, biophysical, or social elements High: adverse environmental effect would have a regional influence on physical, biophysical, or social elements
Evaluation of Significance	"Likely to be significant" would typically involve effects that are: high frequency, irreversible, long term in duration, regional in extent or of high magnitude

7.0 ENVIRONMENTAL EFFECTS ANALYSIS

7.1 Project - Environment Interactions

	Environmental Element	Project Inter-action? Y/N/U	Description of Interaction (How, When, Where)	Type of Potential Effect P/Ntl/Adv	Potential Adverse Environmental Effect
	Soil and Soil Productivity	Y	- Construction activities and site preparation	Adv	- Topsoil loss or degradation - Compaction and rutting of topsoil or upper subsoil in root zone - Admixing leading to alteration of soil properties - Salinization of soil because of changes in groundwater flow patterns or infiltration rates
	Vegetation	Y	- Clearing, construction and operation activities	Adv	- Loss or alteration of native vegetation
					- Loss of species diversity
					- Loss of important vegetation for wildlife
					- Noxious weed introduction and spreading
	Water Quality and Quantity	Y	- Construction of pump stations and installation of underground sump tanks	Adv	- Disruption of surface water hydrologic flow
					- Disruption of subsurface hydrologic flow and reduction of groundwater quality and quantity
					- Change in watertable depth
					- Reduced groundwater flow leading to increased saturation and increased salination
					- Introduction of sediments or any other deleterious substances
	Wetlands	Y	- Clearing vegetation, stripping organic layer, excavating trench, and backfilling during construction	Adv	- Loss or alteration of wetland habitats - Disturbance to surface water and subsurface hydrologic flow

	Environmental Element	Project Inter-action? Y/N/U	Description of Interaction (How, When, Where)	Type of Potential Effect P/Ntl/Adv	Potential Adverse Environmental Effect
	Wildlife and Wildlife Habitat	Y	- Removal of shrubs and trees during clearing of RoW and temporary workspace - Construction activities - Increase in environmental noise level caused by construction and operation activities - Vehicle use on the RoW - Avian mortality caused by collision with powerlines	Adv	- Sensory disturbance to wildlife
					- Sensory disturbance to nesting birds
					- Loss, alteration, fragmentation or reduced capacity of wildlife habitat
					- Loss of breeding, foraging and, potentially, resting habitat for migratory birds
					- Wildlife conflicts and mortality
	Species at Risk (federal) and Species of Special Conservation Status (provincial, territorial, local)	U	- Construction activities during wildlife and migratory bird RAPs	Adv	- Disturbance to SARA listed wildlife species and species of special conservation status and habitat - Disturbance to SARA listed birds and birds species with a special conservation status and their habitat
	Air Quality	Y	- Airborne emissions from equipment during construction - Burning of slash and release of smoke	Adv	- Temporary decrease in air quality
Socio-Economic	Human Occupancy/ Resource Use	U	- Spill or leak during construction and operation	Adv	- Loss or disruption to cattle operation as a result of soil, water and groundwater contamination (see Accidents/Malfunctions below)
	Heritage Resources	U	- Clearing and construction activities	Adv	- Disturbance or destruction of previously unknown heritage resources
	Traditional Land and Resource Use	U	- Clearing and construction activities - Use of equipment and vehicles during construction	Adv	- Loss or alteration of traditional Aboriginal sites - Disruption or inability to carry on traditional activities

	Environmental Element	Project Inter-action? Y/N/U	Description of Interaction (How, When, Where)	Type of Potential Effect P/Nil/Adv	Potential Adverse Environmental Effect
	Socio and Cultural Well-being	N			
	Human Health/ Aesthetics	Y	- Noise and air emissions during construction - Use of equipment and vehicles during construction and operation - Ongoing operation of pumping facilities	Adv	- Increase in nuisance noise and air emissions during construction and operational phases
Other	Accidents/ Malfunctions	Y	- Spill or leak from the facilities or equipment during construction and operations	Adv	- Soil, water and groundwater contamination
	Effects of the Environment on the Project	N			

Legend: Y (Yes); N (No); U (Uncertain); P (Positive); Nil (Neutral); Adv (Adverse)

7.2 Analysis of Potential Adverse Environmental and Socio-Economic Effects to be Mitigated through Standard Measures

The potential adverse environmental and socio-economic effects to be mitigated through standard mitigation measures are presented in Keystone's ESA and subsequent submissions for the Cushing Expansion Project. In addition to the standard design and mitigation measures outlined in the ESA, the following plans are referenced and describe measures to mitigate the potential adverse environmental and socio-economic effects of the Project:

- EPP
- Spill Contingency Plan
- Contaminated Soils Contingency Plan
- Erosion and Sediment Control Plan
- Waste Management Plan
- Adverse Weather Contingency Plan

Should the Project be approved, the NEB would work with Keystone through technical meetings to ensure that best practices would be recorded in the final EPP and in the Keystone Environmental Commitments Tracking List (ECTL).

In addition, the Board notes that Keystone also commits to mitigate the following socio-economic effects through standard mitigation measures:

Potential Adverse Environmental Effect	Commitments and/or Mitigation
Disturbance or destruction of previously unknown heritage resources	- Should any previously unidentified heritage resources sites be encountered during construction of the Project, Keystone has indicated that activity in the area will be halted and will not resume until the appropriate provincial Cultural and Historical Resources Divisions have been informed and appropriate actions have been taken. (See also recommendation in Section 7.5.)
Loss or alteration of traditional Aboriginal sites	- Keystone commits to on-going consultation with Aboriginal communities about potential impacts and to endeavour to come to a resolution that would be acceptable to the parties.
Disruption or inability to carry on traditional activities	- Keystone commits to on-going consultation with Aboriginal communities about potential impacts and to endeavour to come to a resolution that would be acceptable to the parties.

The Board is of the view that for this Project, if Keystone follows the standard design and mitigation measures included within the application (including the appendices), its commitments during the OH-1-2008 hearing and the Board's recommendations, the potential adverse environmental effects are not likely to be significant.

7.3 Detailed Analysis of Potential Adverse Environmental Effects

A detailed analysis is provided for each potential adverse environmental effect which is either of public concern, involves non-standard mitigation measures or requires the implementation of an issue-specific recommendation.

7.3.1 Wildlife and Species at Risk

Background/Issues	Three species of concern have previously been recorded in the region surrounding the proposed Chaplin and Whitewood pump stations in Saskatchewan and are believed to have a high potential of occurrence in the study area. In addition to these species, ten other sensitive species have the potential to occur in the Project study area in Saskatchewan. In September 2007, Keystone conducted a wildlife survey at the proposed Chaplin and Whitewood sites and failed to identify any sensitive species. However, given that construction activities at Chaplin and Whitewood sites could occur during spring or summer, additional surveys are required to ensure that sensitive species are identified and protected using adequate mitigation measures.				
Mitigation Measures	Keystone has committed to: - complete an additional wildlife survey in June 2008 to confirm the presence or absence of species of concern at the Chaplin and Whitewood sites. - adhere to wildlife timing constraints and setback distances for bird and herptile species during rearing and breeding. - avoid construction through native vegetation, wetlands and riparian areas if possible. - in the event that Keystone schedules construction activities at the Chaplin or Whitewood sites within the migratory bird RAP (April 15 and July 31) or any amphibian species RAP, Keystone will employ a qualified biologist to conduct a wildlife survey prior to the commencement of construction.				
Views of the NEB	Given that additional surveys will be required to identify sensitive species and related mitigation measures in the Project area, it is recommended that: - In the event that construction occurs within the RAP for sensitive wildlife species or migratory birds, Keystone file with the Board, prior to construction, the results of these surveys, the related specific mitigation measures to be implemented and evidence of consultation with Environment Canada and relevant provincial authorities (see section 7.5 for detailed recommendations). - Keystone file with the Board, prior to construction, an updated EPP with all the specific wildlife mitigation measures that would be implemented at the Chaplin and Whitewood sites (see section 7.5 for detailed recommendations).				
Evaluation of Significance	Frequency	Duration	Reversibility	Geographical Extent	Magnitude
	Low	Short-Term	Reversible	Local Study Area	Medium to High
	Adverse Effect				
	Not likely to be significant				

See Table 6.1 for definitions of the Evaluation of Significance Criteria.

Legend: ☐ Bio-Physical; ☐ Socio-Economic; ☐ Other

7.3.2 Wetlands, Riparian Areas and Native Vegetation

Background/Issues	There are 3 wetlands at the proposed Chaplin (2) and Whitewood (1) sites in Saskatchewan that may provide habitat for bird and/or amphibian species (see Application, Project Description, section 4.0). Keystone states that avoidance of wetland and riparian areas would not be possible for the proposed Chaplin and Whitewood pump stations, as the alternate sites would be too close to residences to be acceptable. Given the proximity of the pump station sites to the wetlands, Keystone states that it is unlikely that direct effects to these wetlands can be avoided altogether.				
Mitigation Measures and Monitoring	Keystone presents the following potential mitigation measures to reduce environmental effects on these wetlands and riparian areas: - If possible, avoid filling in the wetland when developing the final site grade plan. - During construction, install a temporary sediment fence around the wetland perimeter to restrict surface water drainage from directly entering the wetland and subsequent sedimentation of the wetland. - Establish the final grade plan to direct surface drainage away from the wetland. - Where avoidance of direct impacts is not possible, Keystone would develop a wetland compensation plan in consultation with Environment Canada and Saskatchewan Environment to offset the loss of any wetland habitat. In addition, Keystone will implement a post-construction monitoring program focusing on the reclamation success of topsoil stockpiles, grading, and sediment and erosion control measures.				
Views of the NEB	Given that mitigation measures that were provided by Keystone are not final and that additional field information would be required to develop specific and detailed mitigation measures at the Chaplin and Whitewood sites, it is recommended that Keystone file with the Board, prior to construction, an updated EPP with all the specific wetland mitigation and monitoring measures and reclamation techniques that would be implemented for those sites, including evidence of consultation with Environment Canada, Canadian Wildlife Service. It is also recommended that Keystone file with the Board prior to construction, a wetland monitoring program to ensure that the wetland function would be restored or compensated, including evidence of consultation with Environment Canada, Canadian Wildlife Service (see section 7.5 for detailed recommendations). In addition, it is recommended that Keystone file with the Board a post-construction monitoring report, 6 months after the commencement of operation, and on or before 31 January for each of the subsequent 5 years.				
Evaluation of Significance	Frequency	Duration	Reversibility	Geographical Extent	Magnitude
	Low	Medium to Long-Term	Irreversible	Project Development Area	Medium
	Adverse Effect				
	Not likely to be significant				

See Table 6.1 for definitions of the Evaluation of Significance Criteria.

Legend: ☐ Bio-Physical; ☐ Socio-Economic; ☐ Other

7.3.3 Increase in Nuisance Noise and Air Emissions During Construction and Operation Phase

Background/Issues	Keystone states that the infrastructure would be constructed and operated in largely rural areas, and noise associated with the infrastructure would not significantly change background ambient sound levels. The company states that it intends to use the Alberta Energy and Utilities Board² guide (EUB Directive 38 -2007) for maximum allowable noise from energy-related facilities. For Saskatchewan, as there are no specific guidelines, the company will use the EUB directive. For Manitoba, the company intends to use the maximum acceptable sound levels provided in the Environmental Management Division of Manitoba Conservation guideline for Sound pollution (2000). Following the recommendations of its consultant, Keystone has retained HFP Acoustic Consultants to assist in the noise assessment to further evaluate the potential noise emissions generated by its pump station sites in Canada. Through its intervention, the owner of the Hadwin Cattle Co. Ltd. has indicated a concern about the potential for increased noise as the pump station (PS 07) located in close proximity to its owners' residence and seasonal calving operations.				
Mitigation Measures	Keystone would ensure compliance with the applicable provincial and local noise guidelines to maintain acceptable noise levels and to maintain quality of life for residents near the facilities.				
Monitoring	(See recommendations regarding noise in Section 7.5.)				
Views of the Board	In the event that the proposed Project is approved, the NEB would expect Keystone to fulfill its commitment to comply with the applicable provincial and local noise guidelines. In addition to this standard mitigation, the Board recommends that Keystone file with the Board the results of the Noise Assessment, and Noise Monitoring Plan (see recommendations in Section 7.5.)				
Evaluation of Significance	Frequency	Duration	Reversibility	Geographical Extent	Magnitude
	Low	Medium to Long-Term	Reversible	Local Study Area	Low
	Adverse Effect				
	Not likely to be significant				

See Table 6.1 for definitions of the Evaluation of Significance Criteria.

Legend: ☐ Bio-Physical; ☐ Socio-Economic; ☐ Other

7.3 Cumulative Effects Assessment

The NEB has considered the potential for cumulative environmental effects from this Project in combination with other projects or activities that have been or will be carried out. These projects include, but are not limited to, small scale agricultural improvement projects, as well as the Keystone Pipeline Project. In September 2007, the Board determined, pursuant to the CEA Act, that the Keystone Pipeline Project, the main project to interact with this Project, was not likely to

² Effective 1 January 2008, the Alberta EUB was realigned into two separate utilities boards. The Energy Resources Conservation Board is now responsible for the referenced Directive.

cause significant adverse environmental effects. The Cushing Expansion Project would represent a small increment to the environmental effects of the Keystone Pipeline Project.

The NEB has determined that any potential cumulative environmental effects that are likely to result from these interactions would be of low magnitude and localized. Therefore, it is unlikely that there would be any significant cumulative environmental effects resulting from this Project.

7.4 Recommendations

The following are recommended conditions that may form part of any regulatory decision on the proposed Project under the NEB Act.

Definition for the Commencement of Construction means: clearing of vegetation, groundbreaking and other forms of right-of-way preparation that may have an impact on the environment, but does not include activities associated with normal surveying operations.

It is recommended that Keystone implement or cause to be implemented all of the policies, practices, programs, mitigation measures, recommendations and procedures for the protection of the environment included in or referred to in its application or as otherwise agreed to during questioning in the OH-1-2008 proceeding or in its related submissions.

Further, other recommendations include:

- A)** Keystone shall file with the Board for approval, at least 60 days prior to construction, an updated project specific Environmental Protection Plan (EPP) for the new, modified and relocated pump stations, which Keystone shall implement. The EPP shall describe all environmental protection procedures, and mitigation and monitoring commitments, as set out in Keystone's application, subsequent filings, evidence collected during the hearing process, and through any regulatory requirements. Construction on the new, modified or relocated pump stations shall not commence until Keystone has received approval of its EPP from the Board. The EPP shall include but not be limited to:
 - a. specific wetland mitigation and monitoring measures and reclamation techniques including evidence demonstrating Environment Canada, Canadian Wildlife Service's satisfaction with the above mentioned measures, or if satisfaction cannot be obtained, a table summarizing outstanding concerns and how Keystone intends to address those concerns;
 - b. specific sump tank mitigation measures; and
 - c. a seeding plan specific to Chaplin (pump station 14) and Whitewood (pump station 20) sites, including evidence that seed mixes that will be used for reclamation have the approval of Environment Canada, Canadian Wildlife Service and relevant provincial authorities.
- B)** Keystone shall maintain at its construction office(s), an updated Environmental Tracking Commitments Table listing all regulatory commitments, including but not limited to all commitments resulting from:

- a. the NEB application and subsequent filings;
 - b. undertakings made during the OH-1-2008 proceeding; and
 - c. conditions from permits authorizations and approvals.
- C) In the event that construction occurs within restricted activity periods for sensitive wildlife species, Keystone shall retain a qualified biologist to carry out a survey to identify any sensitive wildlife species. Keystone shall file with the Board, 14 days prior to construction, a wildlife species survey. The survey shall include:
- a. the results of the survey;
 - b. all mitigation strategies to protect any identified Species at Risk, as defined by the *Species at Risk Act*, or species with special conservation status; and
 - c. evidence of consultation with Environment Canada, Canadian Wildlife Service and relevant provincial authorities regarding satisfaction with the proposed mitigation, or if satisfaction cannot be obtained, a table summarizing outstanding concerns and how Keystone intends to address those concerns.
- D) In the event of clearing within restricted activity periods for migratory birds, Keystone shall retain a qualified avian biologist to carry out a survey to identify any migratory birds and nests. The spatial boundaries of the survey for the Project will include at least 30 m beyond the disturbance footprint for migratory birds and 100 m beyond the disturbance footprint for raptors. If any such surveys are required, Keystone shall file with the Board prior to construction at the identified site(s):
- a. evidence to confirm that Environment Canada, Canadian Wildlife Service have reviewed and commented on the proposed methods for the survey;
 - b. the results of the survey;
 - c. mitigation strategies, including monitoring, developed in consultation with Environment Canada, Canadian Wildlife Service to protect any identified migratory birds or their nests; and
 - d. mitigation, including monitoring, developed in consultation with Environment Canada, Canadian Wildlife Service to protect any identified migratory *Species at Risk Act* birds or their nests.
- E) Keystone shall file with the Board, 6 months after the commencement of operation, and on or before 31 January for each of the subsequent 5 years, a post-construction environmental monitoring report (also referred to as "Report on the Status of Reclamation" in the application) which shall include:
- a. a summary of the effectiveness of the environmental mitigation measures applied during construction;
 - b. deviations from plans and alternate mitigation applied as approved by the Board;
 - c. locations on a map or diagram where corrective action was taken during construction and the current status of corrective actions;
 - d. proposed measures and the schedule Keystone shall implement to address any unresolved concerns; and
 - e. a description of the results of:
 - i. re-vegetation as measured against a 85% survival rate of recommended plantings;
 - ii. non-native plant vegetation management.

- F)** Keystone shall file with the Board, at least 60 days prior to commencement of construction, a program to monitor the success of the wetland mitigation measures, which ensures that the wetland function would be restored or compensated and that the “no net loss” of wetland function would be achieved. In addition, the monitoring program shall be filed with evidence demonstrating Environment Canada, Canadian Wildlife Service’s satisfaction with the above mentioned program and associated measures, or if satisfaction cannot be obtained, a table summarizing outstanding concerns and how Keystone intends to address those concerns.
- G)** Keystone shall file with the Board, at least 30 days prior to the planned commencement of construction, the clearance letter from Manitoba provincial authorities for Pump Stations 22 and 24 (Crandall and Wellwood), indicating that all cultural and heritage resource concerns have met licensing and resource conservation requirements and that mitigation suggested by the provincial authority will be implemented.
- H)** Keystone shall:
- a. 60 days prior to commencement of construction:
 - i. file with the Board a summary of the detailed comprehensive noise assessment;
 - ii. provide to the Hadwin Cattle Co. Ltd. and the Alberta Association of Pipeline Landowners a copy of those parts of the summary of the detailed comprehensive noise assessment that pertain to each of them; and
 - iii. where any predicted noise levels would exceed Alberta Energy Utilities Board (known as the Energy Resources Conservation Board effective 1 January 2008) Directive 038 (2007) for Alberta and Saskatchewan and the Environmental Management Division, Manitoba Conservation, Guidelines for Sound Pollution (2000) in Manitoba and any applicable local guidelines or requirements, file with the Board, with a copy to affected landowners, a mitigation plan to address noise levels and potential stakeholder concerns.
 - b. file with the Board, with a copy to affected landowners, the results of noise monitoring to be undertaken within 2 months from the commencement of operation of any pump station sites subject to a noise mitigation plan pursuant to (a) iii).

8.0 THE NEB’S CONCLUSION

The NEB is of the view that with the implementation of Keystone’s commitments, environmental protection procedures and mitigation measures and the NEB’s recommendations, the proposed Project is not likely to cause significant adverse environmental effects.

This represents a determination pursuant to paragraph 20(1)(a) of the CEA Act. This environmental screening report was approved by the NEB on the date specified on the cover page of this report under the heading CEA Act Determination Date.

9.0 NEB CONTACT

Claudine Dutil-Berry
Secretary of the Board
National Energy Board
444 Seventh Avenue S.W.
Calgary, Alberta T2P 0X8
Phone: 1-800-899-1265
Facsimile: 1-877-288-8803
secretary@neb-one.gc.ca

APPENDIX 1:

TransCanada Keystone Pipeline GP Ltd. Proposed Cushing Expansion Project Scope of the Environmental Assessment Pursuant to the *Canadian Environmental Assessment Act*

1.0 INTRODUCTION

On 20 September 2007, the National Energy Board (NEB), as part of its reasons for decision in the OH-1-2007 proceeding, released an Environmental Screening Report that concluded that TransCanada Keystone Pipeline GP Ltd.'s (Keystone) proposal to construct and operate the Canadian portion of the Keystone Pipeline and related facilities was not likely to cause significant adverse environmental effects. The Governor in Council approved the issuance of Certificate of Public Convenience and Necessity OC-51 on 22 November 2007. On 23 November 2007, Keystone applied to the NEB for approval of variances to the Keystone Pipeline and for approval for the construction and operation of additional oil transmission facilities (the Project).

The applied-for modifications and new facilities would increase nominal capacity of the Keystone Pipeline from 69 200 m³/d (435,000 bpd) to 94 000 m³/d (591,000 bpd). An open season held by Keystone in early 2007 secured transportation agreements to justify the extension of the Keystone Pipeline in the United States to Cushing, Oklahoma. The proposed Project would accommodate the volumes to be transported to Cushing and those underpinning the facilities approved pursuant to Certificate OC-51.

If the Board approved Keystone's entire application, Orders made pursuant to section 58 and Part IV of the *National Energy Board Act* (NEB Act) and an amendment to Certificate OC-51, made pursuant to section 21 of the NEB Act, would be required before the Project could proceed. The proposed Project would be subject to an environmental screening under the *Canadian Environmental Assessment Act* (CEA Act).

The scope of this environmental assessment (EA) was established in accordance with the CEA Act and its *Regulations Respecting the Coordination by Federal Authorities of Environmental Assessment Procedures and Requirements*.

2.0 SCOPE OF THE ASSESSMENT

2.1 Scope of the Project

The scope of the Project as determined for the purposes of the EA includes the various components of the Project as described by Keystone in its application for the Project, and the physical works and activities described in this document.

The scope of the Project includes construction, operation, maintenance and foreseeable changes and, where relevant, the abandonment, decommissioning and rehabilitation of sites relating to the entire Project, and specifically, the physical works and activities described below.

The proposed Keystone Cushing Expansion in Canada would require:

- (a) the construction of seven new pump stations with a total of fourteen 3000 kW pumps;
- (b) the addition of six 3000 kW pumps and thirteen 3700 kW pumps at thirteen of the pump stations approved by Certificate OC-51;
- (c) the replacement of a total of twenty 3000 kW pumps with 3700 kW pumps at seven of the pump stations approved by Certificate OC-51;
- (d) the relocation of three of the pump stations approved by Certificate OC-51; and
- (e) modifications to approved and new associated piping and facilities.

The proposed new and modified pump stations and pumps are shown in Table 1.

Table 1

Pump Station Number, Name and Location	Quantity and Power of Pumping Units Approved by Certificate OC-51	Cushing Expansion: Proposed Revisions to the Quantity and Power of Pumping Units Approved by Certificate OC-51	Cushing Expansion: Quantity and Power of Proposed Additional Pumping Units	Total
5 – Hardisty, AB	4 x 3000 kW	4 x 3700 kW	2 x 3700 kW	6 x 3700 kW
6 – Lakesend, AB	2 x 3000 kW	2 x 3700 kW	3 x 3700 kW	5 x 3700 kW
7 – Monitor ¹ , AB	3 x 3000 kW	3 x 3700 kW	2 x 3700 kW	5 x 3700 kW
8 – Oyen ¹ , AB	3 x 3000 kW	3 x 3700 kW	2 x 3700 kW	5 x 3700 kW
9 – Bindloss, AB	3 x 3000 kW	3 x 3700 kW	1 x 3700 kW	4 x 3700 kW
10 – Liebenthal ² , SK	-	-	3 x 3000 kW	3 x 3000 kW
11 – Cabri, SK	2 x 3000 kW	-	1 x 3000 kW	3 x 3000 kW
12 – Stewart Valley ² , SK	-	-	2 x 3000 kW	2 x 3000 kW
13 – Herbert ³ , SK	2 x 3000 kW	-	-	2 x 3000 kW
14 – Chaplin ² , SK	-	-	2 x 3000 kW	2 x 3000 kW
15 – Caron ³ , SK	3 x 3000 kW	-	-	3 x 3000 kW
16 – Belle Plaine ² , SK	-	-	2 x 3000 kW	2 x 3000 kW
17 – Regina, SK	2 x 3000 kW	-	1 x 3000 kW	3 x 3000 kW
18 – Kendal, SK	2 x 3000 kW	-	1 x 3000 kW	3 x 3000 kW
19 – Grenfell ¹ , SK	2 x 3000 kW	-	-	2 x 3000 kW
20 – Whitewood ² , SK	-	-	2 x 3000 kW	2 x 3000 kW
21 – Moosomin, SK	2 x 3000 kW	-	1 x 3000 kW	3 x 3000 kW
22 – Crandall ² , MB	-	-	2 x 3000 kW	2 x 3000 kW
23 – Rapid City, MB	2 x 3000 kW	-	1 x 3000 kW	3 x 3000 kW
24 – Wellwood ² , MB	-	-	1 x 3000 kW	1 x 3000 kW
25 – Portage la Prairie, MB	2 x 3000 kW	-	1 x 3000 kW	3 x 3000 kW
26 – Carman, MB	3 x 3000 kW	3 x 3700 kW	1 x 3700 kW	4 x 3700 kW
27 – Haskett ¹ , MB	2 x 3000 kW	2 x 3700 kW	2 x 3700 kW	4 x 3700 kW

1 Revised location from Certificate OC-51.

2 Proposed new Pump Station.

3 No changes in facilities approved in Certificate OC-51.

2.2 Factors to be Considered

The EA will include a consideration of the following factors listed in paragraphs 16(1)(a) to (d) of the CEA Act:

- (a) the environmental effects of the Project, including the environmental effects of malfunctions or accidents that may occur in connection with the Project and any cumulative environmental effects that are likely to result from the Project in combination with other projects or activities that have been or will be carried out;
- (b) the significance of the effects referred to in paragraph (a);
- (c) comments from the public that are received during the EA process; and
- (d) measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the Project.

For further clarity, subsection 2(1) of the CEA Act defines 'environmental effect' as:

- (a) any change that the project may cause in the environment, including any change that the project may cause to a listed wildlife species, its critical habitat or the residences of individuals of that species as defined in the *Species at Risk Act*;
- (b) any effect of any change referred to in paragraph (a) on
 - i. health and socio-economic conditions,
 - ii. physical and cultural heritage,
 - iii. the current use of lands and resources for traditional purposes by aboriginal persons,
 - iv. any structure, site or thing that is of historical, palaeontological, or architectural significance; or
- (c) any change to the project that may be caused by the environment,

whether any such change or effect occurs within or outside Canada.

2.3 Scope of Factors to be Considered

The EA will consider the potential effects of the proposed Project within spatial and temporal boundaries which encompass the periods and areas during and within which the Project may potentially interact with, and have an effect on, components of the environment. These boundaries will vary with the issues and factors considered, and will include:

- construction, operation, decommissioning, site rehabilitation and abandonment or other undertakings that are proposed by the Proponent or that are likely to be carried out in relation to the physical works proposed by the Proponent, including mitigation and habitat replacement measures;
- the natural variation of a population or ecological component;
- the timing of sensitive life cycle phases of wildlife species in relation to the scheduling of the Project;

- the time required for an effect to become evident;
- the time required for a population or ecological component to recover from an effect and return to a pre-effect condition, including the estimated degree of recovery;
- the area affected by the Project; and
- the area within which a population or ecological component functions and within which a Project effect may be felt.

For the purpose of the assessment of the cumulative environmental effects, the consideration of other projects or activities that have been or will be carried out will include those for which formal plans or applications have been made.

Appendix VII

Order XO-T241-07-2008

ORDER-T241-07-2008

THE MATTER OF the *National Energy Board Act* (NEB Act) and the regulations made thereunder; and

IN THE MATTER OF TransCanada Keystone Pipeline GP Ltd. (Keystone) Cushing Expansion Application dated 23 November 2007, pursuant to subsection 21(1) of the NEB Act for modifications to pump stations approved in the OH-1-2007 proceeding and Certificate OC-51, and pursuant to section 58 of the NEB Act for new pump stations and new pumping units at previously approved pump stations (Cushing Expansion Project), filed with the National Energy Board under Files OF-Fac-Oil-T241-2007-01 01 and OF-Fac-Oil-T241-2006-01 02.

BEFORE the Board on 23 June 2008.

WHEREAS the Board received an application pursuant to subsection 21(1) and section 58 of the NEB Act from Keystone, dated 23 November 2007, for the Cushing Expansion Project in Canada at an estimated total cost of \$348 million (Application);

AND WHEREAS, pursuant to the *Canadian Environmental Assessment Act* (CEA Act), the Board has considered the information submitted by Keystone and has performed an environmental screening of the Cushing Expansion Project;

AND WHEREAS the Board has determined, pursuant to paragraph 20(1)(a) of the CEA Act, that taking into account the implementation of Keystone's proposed mitigative measures, the Cushing Expansion Project is not likely to cause significant adverse environmental effects;

AND WHEREAS a public hearing was held pursuant to Hearing Order OH-1-2008 on 8 April 2008 in Oyen, Alberta, at which the Board heard Keystone and all interested parties to the proceeding;

AND WHEREAS the Cushing Expansion Project includes in part, the construction of seven new pump stations on the Keystone Pipeline and the addition of pumping units at thirteen of the pump stations approved in OH-1-2007 and Certificate OC-51, that Keystone has applied for pursuant to section 58 of the Act (Cushing Expansion section 58 Project);

AND WHEREAS the Cushing Expansion section 58 Project is described in Schedule A, attached to and forming part of this Order;

AND WHEREAS the balance of the Cushing Expansion Project, including the increase in motor sizes of 20 pumping units at seven of the pump stations approved in OH-1-2007 and the

relocation of three of the pump stations approved in OH-1-2007, was filed pursuant to subsection 21(1) of the NEB Act and is not included in this Order;

AND WHEREAS the Board has examined the Application in respect of the Cushing Expansion section 58 Project facilities and considers it to be in the public interest to grant the relief requested in respect of these facilities;

IT IS ORDERED that, pursuant to section 58 of the NEB Act, the construction of the Cushing Expansion section 58 Project as identified in Schedule A, is exempt from the provisions of paragraphs 30(1)(a) and sections 31 and 32 of the NEB Act, subject to the conditions set out below.

In the following conditions, the expression "commencement of construction" means clearing of vegetation, ground-breaking and other forms of right-of-way preparation that may have an impact on the environment, but does not include activities associated with normal survey operations.

General

1. Unless the Board otherwise directs, Keystone shall cause the approved Cushing Expansion section 58 Project to be designed, located, constructed, installed and operated in accordance with the specifications, standards and other information referred to in its application or as otherwise agreed to during questioning in the OH-1-2008 proceeding or in its related submissions.
2. Keystone shall implement or cause to be implemented all of the policies, practices, programs, mitigation measures, recommendations and procedures for the protection of the environment in respect of the Cushing Expansion section 58 Project facilities included in or referred to in its Application or as otherwise agreed to during questioning in the OH-1-2008 proceeding or in its related submissions.
3. Keystone shall file with the Board, at least 30 days prior to any actions related to the Cushing Expansion section 58 Project facilities, a table which tracks all commitments related to the Cushing Expansion section 58 Project facilities resulting from the:
 - (a) application and subsequent filings;
 - (b) undertakings made during the OH-1-2008 proceeding; and
 - (c) approval conditions.

The table shall be updated periodically as needed to reflect any changes to those commitments.

Prior to the Commencement of Construction

4. Keystone shall file with the Board, at least 14 days prior to the commencement of construction of the Cushing Expansion section 58 Project facilities, a construction schedule or schedules identifying major construction activities and shall notify the Board of any modifications to the schedule or schedules as they occur. Keystone shall file construction progress reports on a monthly basis until completion. The report shall

include an updated construction schedule identifying major construction activities, information on activities carried out during the reporting period, any environmental and safety issues and non-compliances, and measures undertaken for the resolution of each issue and non-compliance.

5. In the event that construction of any Cushing Expansion section 58 Project facilities occurs within restricted activity periods for sensitive wildlife species, Keystone shall retain a qualified biologist to carry out a survey to identify any sensitive wildlife species. Keystone shall file with the Board, 14 days prior to construction, the wildlife species survey. The survey shall include:
 - (a) the results of the survey;
 - (b) all mitigation strategies to protect any identified Species at Risk, as defined by the *Species at Risk Act*, or species with special conservation status; and
 - (c) evidence of consultation with Environment Canada, Canadian Wildlife Service and relevant provincial authorities regarding satisfaction with the proposed mitigation, or if satisfaction cannot be obtained, a table summarizing outstanding concerns and how Keystone intends to address those concerns.
6. Keystone shall file with the Board, at least 30 days prior to the commencement of construction of the Cushing Expansion section 58 Project facilities, a Construction Safety Manual.
7. Keystone shall file with the Board, at least 30 days prior to the commencement of construction of the Cushing Expansion section 58 Project facilities, the clearance letter from Manitoba provincial authorities for Pump stations 22 and 24, indicating that all cultural and heritage resource concerns have met licensing and resource conservation requirements and that mitigation suggested by the provincial authority will be implemented.
8. Keystone shall file with the Board, 30 days prior to the commencement of construction of the Cushing Expansion section 58 Project facilities, an update of its consultation with all potentially affected persons and groups, in the form of updated Consultation Tracking Tables. This update shall include a summary of any additional issues arising from the ongoing consultation with stakeholders identified on the OH-1-2008 record, list any additional stakeholders and explain how concerns have been addressed.
9. Keystone shall file with the Board for approval, at least 60 days prior to construction of the Cushing Expansion section 58 Project facilities, an updated project specific Environmental Protection Plan (EPP) for the Cushing Expansion section 58 Project pump stations, which Keystone shall implement. The EPP shall describe all environmental protection procedures, and mitigation and monitoring commitments, as set out in Keystone's application, subsequent filings, evidence collected during the hearing process, and through any regulatory requirements. Construction of the Cushing Expansion section 58 Project shall not commence until Keystone has received approval of its EPP from the Board. The EPP shall include, but not be limited to:
 - (a) specific wetland mitigation and monitoring measures and reclamation techniques including evidence demonstrating Environment Canada, Canadian Wildlife

Service's satisfaction with the above mentioned measures, or if satisfaction cannot be obtained, a table summarizing outstanding concerns and how Keystone intends to address those concerns;

- (b) mitigation measures specific to sump tank leaks and ruptures; and
- (c) a seeding plan specific to Chaplin (pump station 14) and Whitewood (pump station 20) sites, including evidence that seed mixes that will be used for reclamation have the approval of Environment Canada, Canadian Wildlife Service and relevant provincial authorities.

10. Keystone shall file with the Board, at least 60 days prior to commencement of construction of the Cushing Expansion section 58 Project facilities, a program to monitor the success of the wetland mitigation measures, which ensures that the wetland function would be restored or compensated and that the "no net loss" of wetland function would be achieved. In addition, the monitoring program shall be filed with evidence demonstrating Environment Canada, Canadian Wildlife Service's satisfaction with the above mentioned program and associated measures, or if satisfaction cannot be obtained, a table summarizing outstanding concerns and how Keystone intends to address those concerns.

11. Keystone shall:

- (a) 60 days prior to commencement of construction of the Cushing Expansion section 58 Project facilities:
 - i) file with the Board a summary of the detailed comprehensive noise assessment;
 - ii) provide to the Hadwin Cattle Co. Ltd. and the Alberta Association of Pipeline Landowners a copy of those parts of the summary of the detailed comprehensive noise assessment that pertain to each of them; and
 - iii) where any predicted noise levels would exceed Alberta Energy Utilities Board (known as the Energy Resources Conservation Board effective 1 January 2008) Directive 038 (2007) for Alberta and Saskatchewan and the Environmental Management Division, Manitoba Conservation, Guidelines for Sound Pollution (2000) in Manitoba, and any applicable local guidelines or requirements, file with the Board, and serve on affected landowners, a mitigation plan to address noise levels and potential stakeholder concerns; and
- (b) file with the Board, and serve on affected landowners, the results of noise monitoring to be undertaken within 2 months from the commencement of operation of any pump station sites subject to a noise mitigation plan pursuant to (a) iii).

During Construction

12. Keystone shall, during construction of the Cushing Expansion section 58 Project, maintain for audit purposes at each construction site:

- (a) a copy of the welding procedures;
- (b) the non-destructive testing procedures used on the project; and
- (c) all supporting documentation related to non-destructive testing.

13. In the event of clearing in respect of the construction of the Cushing Expansion section 58 Project facilities within restricted activity periods for migratory birds, Keystone shall retain a qualified avian biologist to carry out a survey to identify any migratory birds and nests. The spatial boundaries of the survey for the Cushing Expansion section 58 Project will include at least 30 m beyond the disturbance footprint for migratory birds and 100 m beyond the disturbance footprint for raptors. For such surveys, Keystone shall file with the Board prior to construction at the identified site(s):
 - (a) evidence confirming that Environment Canada, Canadian Wildlife Service have reviewed and commented on the proposed methods for the survey;
 - (b) the results of the survey;
 - (c) mitigation strategies, including monitoring, developed in consultation with Environment Canada and Canadian Wildlife Service to protect any identified migratory birds or their nests; and
 - (d) mitigation, including monitoring, developed in consultation with Environment Canada and Canadian Wildlife Service to protect any identified migratory *Species at Risk Act* birds or their nests.
14. Keystone shall maintain at its construction office(s), an updated Environmental Tracking Commitments Table listing all regulatory commitments with respect to the Cushing Expansion section 58 Project, including but not limited to all commitments resulting from:
 - (a) the NEB Application and subsequent filings;
 - (b) undertakings made during the OH-1-2008 proceeding; and
 - (c) conditions from permits authorizations and approvals.

Prior to Submission of the First Application for Leave to Open

15. Keystone shall file with the Board for approval, at least 60 days prior to the submission of its first leave to open application for the Cushing Expansion section 58 Project facilities, an updated engineering assessment of Line 100-1.
16. Keystone shall file with the Board, at least 120 days prior to submission of its first leave to open application for the Cushing Expansion section 58 Project facilities, an updated Emergency Procedures Manual to include the Cushing Expansion section 58 Project facilities.

Post Construction

17. Within 30 days of the date that the Cushing Expansion section 58 Project facilities are placed in service, Keystone shall file with the Board a confirmation, by an officer of the company, that the approved construction of the Cushing Expansion section 58 Project was completed and constructed in compliance with all applicable conditions in this Order. If compliance with any of these conditions cannot be confirmed, the officer of the company shall file with the Board details as to why compliance cannot be confirmed. The filing required by this condition shall include a statement confirming that the signatory to the filing is an officer of the company.

18. Keystone shall file with the Board, 6 months after the commencement of operation of the section 58 Project facilities, and on or before 31 January for each of the subsequent 5 years, a post-construction environmental monitoring report (also referred to as "Report on the Status of Reclamation" in the Application) which shall include:
- (a) a summary of the effectiveness of the environmental mitigation measures applied during construction;
 - (b) deviations from plans and alternate mitigation applied as approved by the Board;
 - (c) locations on a map or diagram where corrective action was taken during construction and the current status of corrective actions;
 - (d) proposed measures and the schedule Keystone shall implement to address any unresolved concerns; and
 - (e) a description of the results of:
 - i) re-vegetation as measured against a 85% survival rate of recommended plantings; and
 - ii) non-native plant vegetation management.

Expiration of Order

19. Unless the Board otherwise directs prior to 17 July 2009, this Order shall expire on 17 July 2009 unless construction in respect of the Cushing Expansion section 58 Project has commenced by that date.

Schedule A
National Energy Board XO-T241-07-2008

TransCanada Keystone Pipeline GP Ltd.
Application dated 23 November 2007 for the Cushing Expansion

Project Assessed Pursuant to section 58 of the NEB Act

Facilities Specifications

Construction Type	New construction; new pumping units	New construction; new pumping units	New construction; new pumping units
Facility Type	Pump station	Pump station	Pump station
Name of Facility	PS 5 – Hardisty	PS 6 – Lakesend	PS 7 - Monitor
Location of Facility	Alberta	Alberta	Alberta
Pump Power	2 x 3700 kW	3 x 3700 kW	2 x 3700 kW

Construction Type	New construction; new pumping units	New construction; new pumping units	New construction; new pump station
Facility Type	Pump station	Pump station	Pump station
Name of Facility	PS 8 - Oyen	PS 9 - Bindloss	PS 10 - Liebenthal
Location of Facility	Alberta	Alberta	Saskatchewan
Pump Power	2 x 3700 kW	1 x 3700 kW	3 x 3000 kW

Construction Type	New construction; new pumping units	New construction; new pump station	New construction; new pump station
Facility Type	Pump station	Pump station	Pump station
Name of Facility	PS 11 – Cabri	PS 12 – Stewart Valley	PS 14 - Chaplin
Location of Facility	Saskatchewan	Saskatchewan	Saskatchewan
Pump Power	1 x 3000 kW	2 x 3000 kW	2 x 3000 kW

Construction Type	New construction; new pump station	New construction; new pumping units	New construction; new pumping units
Facility Type	Pump station	Pump station	Pump station
Name of Facility	PS 16 – Belle Plaine	PS 17 - Regina	PS 18 - Kendal
Location of Facility	Saskatchewan	Saskatchewan	Saskatchewan
Pump Power	2 x 3000 kW	1 x 3000 kW	1 x 3000 kW

Construction Type	New construction; new pump station	New construction; new pumping units	New construction; new pump station
Facility Type	Pump station	Pump station	Pump station
Name of Facility	PS 20 - Whitewood	PS 21 - Moosomin	PS 22 – Crandall
Location of Facility	Saskatchewan	Saskatchewan	Manitoba
Pump Power	2 x 3000 kW	1 x 3000 kW	2 x 3000 kW

Construction Type	New construction; new pumping units	New construction; new pump station	New construction; new pumping units
Facility Type	Pump station	Pump station	Pump station
Name of Facility	PS 23 – Rapid City	PS 24 – Wellwood	PS 25 – Portage la Prairie
Location of Facility	Manitoba	Manitoba	Manitoba
Pump Power	1 x 3000 kW	1 x 3000 kW	1 x 3000 kW

Construction Type	New construction; new pumping units	New construction; new pumping units
Facility Type	Pump station	Pump station
Name of Facility	PS 26 – Carman	PS 27 – Haskett
Location of Facility	Manitoba	Manitoba
Pump Power	1 x 3700 kW	2 x 3700 kW

Appendix VIII

Conditions Applicable to Varied Facilities

With respect to the facilities applied for in the Cushing Expansion Application pursuant to section 21 of the NEB Act (Cushing Expansion section 21 Project), the Board will recommend to the Governor in Council that Certificate OC-51 be varied and that an amended certificate be issued in respect of the Cushing Expansion section 21 Project facilities subject to the following conditions. The Cushing Expansion section 21 Project facilities are described in Schedule B following the conditions applicable to the varied facilities.

General

1. Unless the Board otherwise directs, Keystone shall cause the approved Cushing Expansion section 21 Project to be designed, located, constructed, installed and operated in accordance with the specifications, standards and other information referred to in its application or as otherwise agreed to during questioning in the OH-1-2008 proceeding or in its related submissions.
2. Keystone shall implement or cause to be implemented all of the policies, practices, programs, mitigation measures, recommendations and procedures for the protection of the environment in respect of the Cushing Expansion section 21 Project included in or referred to in its Application or as otherwise agreed to during questioning in the OH-1-2008 proceeding or in its related submissions.
3. Keystone shall file with the Board, at least 30 days prior to any actions or modifications related to the Cushing Expansion section 21 Project facilities, a table which tracks all commitments related to the Cushing Expansion section 21 Project facilities resulting from the:
 - (a) application and subsequent filings;
 - (b) undertakings made during the OH-1-2008 proceeding; and
 - (c) approval conditions.

The table shall be updated periodically as needed to reflect any changes to those commitments.

Prior to the Commencement of Construction

4. Keystone shall file with the Board, at least 14 days prior to the commencement of construction of the Cushing Expansion section 21 Project facilities, a construction schedule or schedules identifying major construction activities and shall notify the Board of any modifications to the schedule or schedules as they occur. Keystone shall file construction progress reports on a monthly basis until completion. The report shall include an updated construction schedule identifying major construction activities, information on activities carried out during the reporting period, any environmental and safety issues and non-compliances, and measures undertaken for the resolution of each issue and non-compliance.

5. In the event that construction of any Cushing Expansion section 21 Project facilities occurs within restricted activity periods for sensitive wildlife species, Keystone shall retain a qualified biologist to carry out a survey to identify any sensitive wildlife species. Keystone shall file with the Board, 14 days prior to construction of the Cushing Expansion section 21 Project facilities, the wildlife species survey. The survey shall include:
 - (a) the results of the survey;
 - (b) all mitigation strategies to protect any identified Species at Risk, as defined by the *Species at Risk Act*, or species with special conservation status; and
 - (c) evidence of consultation with Environment Canada, Canadian Wildlife Service and relevant provincial authorities regarding satisfaction with the proposed mitigation, or if satisfaction cannot be obtained, a table summarizing outstanding concerns and how Keystone intends to address those concerns.
6. Keystone shall file with the Board, at least 30 days prior to the commencement of construction of the Cushing Expansion section 21 Project facilities, a Construction Safety Manual.
7. Keystone shall file with the Board, 30 days prior to the commencement of construction of the Cushing Expansion section 21 Project facilities, an update of its consultation with all potentially affected persons and groups, in the form of updated Consultation Tracking Tables. This update shall include a summary of any additional issues arising from the ongoing consultation with stakeholders identified on the OH-1-2008 record, list any additional stakeholders and explain how concerns have been addressed.
8. Keystone shall file with the Board for approval, at least 60 days prior to construction of the Cushing Expansion section 21 Project facilities, an updated project specific Environmental Protection Plan (EPP) for the Cushing Expansion section 21 Project pump stations, which Keystone shall implement. The EPP shall describe all environmental protection procedures, and mitigation and monitoring commitments, as set out in Keystone's application, subsequent filings, evidence collected during the hearing process, and through any regulatory requirements. Construction of the Cushing Expansion section 21 Project shall not commence until Keystone has received approval of its EPP from the Board. The EPP shall include, but not be limited to:
 - (a) specific wetland mitigation and monitoring measures and reclamation techniques including evidence demonstrating Environment Canada, Canadian Wildlife Service's satisfaction with the above mentioned measures, or if satisfaction cannot be obtained, a table summarizing outstanding concerns and how Keystone intends to address those concerns; and
 - (b) mitigation measures specific to sump tank leaks and ruptures.
9. Keystone shall file with the Board, at least 60 days prior to commencement of construction of the Cushing Expansion section 21 Project facilities, a program to monitor the success of the wetland mitigation measures, which ensures that the wetland function would be restored or compensated and that the "no net loss" of wetland function would be achieved. In addition, the monitoring program shall be filed with evidence demonstrating Environment Canada, Canadian Wildlife Service's satisfaction with the

above mentioned program and associated measures, or if satisfaction cannot be obtained, a table summarizing outstanding concerns and how Keystone intends to address those concerns.

10. Keystone shall:
 - (a) 60 days prior to commencement of construction of the Cushing Expansion section 21 Project facilities:
 - i) file with the Board a summary of the detailed comprehensive noise assessment of the Cushing Expansion section 21 Project pump stations;
 - ii) provide to the Hadwin Cattle Co. Ltd. and the Alberta Association of Pipeline Landowners a copy of those parts of the summary of the detailed comprehensive noise assessment that pertain to each of them; and
 - iii) where any predicted noise levels would exceed Alberta Energy Utilities Board (known as the Energy Resources Conservation Board effective 1 January 2008) Directive 038 (2007) for Alberta and Saskatchewan and the Environmental Management Division, Manitoba Conservation, Guidelines for Sound Pollution (2000) in Manitoba, and any applicable local guidelines or requirements, file with the Board, and serve affected landowners, a mitigation plan to address noise levels and potential stakeholder concerns; and
 - (b) file with the Board, and serve affected landowners, the results of noise monitoring to be undertaken within 2 months from the commencement of operation of any pump station sites subject to a noise mitigation plan pursuant to (a) iii).

During Construction

11. Keystone shall, during construction of the Cushing Expansion section 21 Project facilities, maintain for audit purposes at each construction site:
 - (a) a copy of the welding procedures;
 - (b) the non-destructive testing procedures used on the project; and
 - (c) all supporting documentation related to non-destructive testing.
12. In the event of clearing in respect of the Cushing Expansion section 21 Project, within restricted activity periods for migratory birds, Keystone shall retain a qualified avian biologist to carry out a survey to identify any migratory birds and nests. The spatial boundaries of the survey for the Cushing Expansion section 21 Project will include at least 30 m beyond the disturbance footprint for migratory birds and 100 m beyond the disturbance footprint for raptors. If any such surveys are required, Keystone shall file with the Board prior to construction at the identified site(s):
 - (a) evidence confirming that Environment Canada, Canadian Wildlife Service have reviewed and commented on the proposed methods for the survey;
 - (b) the results of the survey;
 - (c) mitigation strategies, including monitoring, developed in consultation with Environment Canada and Canadian Wildlife Service to protect any identified migratory birds or their nests; and

- (d) mitigation, including monitoring, developed in consultation with Environment Canada and Canadian Wildlife Service to protect any identified migratory *Species at Risk Act* birds or their nests.
13. Keystone shall maintain at its construction office(s), an updated Environmental Tracking Commitments Table listing all regulatory commitments with respect to the Cushing Expansion section 21 Project, including but not limited to all commitments resulting from:
- (a) the NEB Application and subsequent filings;
 - (b) undertakings made during the OH-1-2008 proceeding; and
 - (c) conditions from permits authorizations and approvals.

Prior to Submission of the First Application for Leave to Open

14. Keystone shall file with the Board for approval, at least 60 days prior to the submission of its first leave to open application for the Cushing Expansion section 21 Project facilities, an updated engineering assessment of Line 100-1.
15. Keystone shall file with the Board for approval, at least 90 days prior to submission of its first leave to open application for the Cushing Expansion section 21 Project facilities, a report that verifies adequate sump tank capacity at all pump stations approved under OH-1-2007, taking into account the Cushing Expansion Project facilities.
16. Keystone shall file with the Board, at least 120 days prior to submission of its first leave to open application for the Cushing Expansion section 21 Project facilities, an updated Emergency Procedures Manual to include the Cushing Expansion section 21 Project facilities.

Post Construction

17. Within 30 days of the date that the Cushing Expansion section 21 Project facilities are placed in service, Keystone shall file with the Board a confirmation, by an officer of the company, that the approved construction of the Cushing Expansion section 21 Project was completed and constructed in compliance with all applicable conditions in this Order. If compliance with any of these conditions cannot be confirmed, the officer of the company shall file with the Board details as to why compliance cannot be confirmed. The filing required by this condition shall include a statement confirming that the signatory to the filing is an officer of the company.
18. Keystone shall file with the Board, 6 months after the commencement of operation of the section 21 Project facilities, and on or before 31 January for each of the subsequent 5 years, a post-construction environmental monitoring report (also referred to as "Report on the Status of Reclamation" in the Application) which shall include:
- (a) a summary of the effectiveness of the environmental mitigation measures applied during construction;
 - (b) deviations from plans and alternate mitigation applied as approved by the Board;
 - (c) locations on a map or diagram where corrective action was taken during construction and the current status of corrective actions;

- (d) proposed measures and the schedule Keystone shall implement to address any unresolved concerns; and
- (e) a description of the results of:
 - i) re-vegetation as measured against a 85% survival rate of recommended plantings; and
 - ii) non-native plant vegetation management.

Expiration of Order

19. Unless the Board otherwise directs prior to 31 Decmeber 2009, this Amending Certificate shall expire on 31 Decmeber 2009 unless construction in respect of the Cushing Expansion section 21 Project has commenced by that date.

Schedule B
TransCanada Keystone Pipeline GP Ltd.
Application dated 23 November 2007 for the Cushing Expansion

Project Assessed Pursuant to the section 21 of the NEB Act

Facilities Specifications

Construction Type	Modification	Modification	Modification and Relocation
Facility Type	Pump station	Pump station	Pump station
Name of Facility	PS 5 – Hardisty	PS 6 – Lakesend	PS 7 - Monitor
Location of Facility	Alberta	Alberta	Alberta
Pump Power	4 x 3700 kW	2 x 3700 kW	3 x 3700 kW

Construction Type	Modification and Relocation	Modification	Modification
Facility Type	Pump station	Pump station	Pump station
Name of Facility	PS 8 - Oyen	PS 9 - Bindloss	PS 26 - Carman
Location of Facility	Alberta	Alberta	Manitoba
Pump Power	3 x 3700 kW	3 x 3700 kW	3 x 3700 kW

Construction Type	Modification and Relocation
Facility Type	Pump station
Name of Facility	PS 27 – Haskett
Location of Facility	Manitoba
Pump Power	2 x 3700 kW

Appendix IX

Conditions Attached to Certificate OC-51

In these conditions, the expression 'commencement of construction' means: clearing of vegetation, ground-breaking and other forms of right-of-way preparation that may have an impact on the environment, but does not include activities associated with normal surveying operations.

General

1. Keystone shall cause the approved Project to be designed, located, constructed, installed, and operated in accordance with the specifications, standards and other information referred to in its application or as otherwise agreed to during questioning in the OH-1-2007 proceeding or in its related submissions.
2. Keystone shall implement or cause to be implemented all of the policies, practices, programs, mitigation measures, recommendations and procedures for the protection of the environment included in or referred to in its application or as otherwise agreed to during questioning in the OH-1-2007 proceeding or in its related submissions.
3. Keystone shall file with the Board, at least 30 days prior to any actions or modifications related to Line 100-1, a table which tracks all commitments related to the Line 100-1 Change of service resulting from the:
 - (a) application and subsequent filings;
 - (b) undertakings made during the OH-1-2007 proceeding; and
 - (c) approval conditions.

Keystone shall also file monthly status updates of the table until the final leave to open is granted by the Board.

4.
 - (a) Keystone shall engage an independent third party to qualify the in-line inspection of Line 100-1 in gas service. The qualification process shall be analogous to the requirements set forth in American Petroleum Institute Standard 1163.
 - (b) The scope of the third party activities and deliverables shall be determined by the Board. Keystone shall advise the Board, at least 30 days in advance, when it requires the scope of the third party activities and deliverables.
 - (c) Keystone shall select the third party from the following list, or provide an alternative party to the Board for approval:
 - i) Det Norske Veritas
 - ii) Lloyd's Register
 - iii) ABS Consulting
 - iv) Germanischer Lloyd
 - (d) Keystone shall file with the Board, at least 90 days prior to submission of its first leave to open application, the final report of the third party reviewer.

5.
 - (a) Keystone shall engage an independent third party to perform an independent verification of an updated engineering assessment of Line 100-1.
 - (b) The scope of the third party activities and deliverables shall be determined by the Board. Keystone shall advise the Board, at least 30 days in advance, when it requires the scope of the third party activities and deliverables.
 - (c) Keystone shall select the third party from the following list, or provide an alternative party to the Board for approval:
 - i) Det Norske Veritas
 - ii) Lloyd's Register
 - iii) ABS Consulting
 - iv) Germanischer Lloyd
 - (d) Keystone shall file with the Board for approval, at least 60 days prior to commencing line fill, the final engineering assessment that determines Line 100-1 is suitable for liquid service.
 - (e) Keystone shall file with the Board, at least 60 days prior to commencing line fill, the final report of the third party reviewer on the engineering assessment.
 - (f) In addition to CSA Z662-07 requirements, the engineering assessment shall consider:
 - i) the findings of performance testing conducted to ascertain the dynamic response of the pipe materials to fatigue loading representative of the pressure spectrum anticipated in liquid service. Testing shall incorporate the materials of all manufacturers present on Line 100-1;
 - ii) the line fill plan; and
 - iii) the third party final report.
6. Keystone shall maintain at its construction office(s):
 - (a) an updated Environmental Tracking Commitments Table listing all regulatory commitments, including but not limited to all commitments resulting from:
 - i) the NEB application and subsequent filings;
 - ii) undertakings made during the OH-1-2007 proceeding; and
 - iii) conditions from permits authorizations and approvals.
 - (b) copies of any permits approvals or authorizations for the applied-for facilities issued by federal, provincial or other permitting agencies, which include environmental conditions or site-specific mitigative or monitoring measures; and
 - (c) any subsequent variances to any permits, approvals or authorizations.
7. The facility to be constructed and operated pursuant to this Certificate shall be owned by TransCanada Keystone Pipeline GP Ltd., as the general partner acting on behalf of the TransCanada Keystone Pipeline Limited Partnership, and operated by TransCanada PipeLines Limited.

Prior to the Commencement of Construction

8. Keystone shall file with the Board for approval, at least 60 days prior to the commencement of construction, an updated, Project-specific Environmental Protection Plan (EPP). The EPP shall be a comprehensive compilation of all environmental protection procedures, mitigation measures, fish and wildlife restricted activity periods

and monitoring commitments, as set out in Keystone's application for the Project, subsequent filings or as otherwise agreed to during questioning in the OH-1-2007 proceeding or in its related submissions. The EPP shall also include the results of additional studies conducted in 2007, updated Environmental Alignment Sheets and Watercourse Data Sheets. Construction shall not commence until Keystone has received approval of its EPP.

9. Keystone shall file with the Board for approval, at least 45 days prior to commencement of construction, a Native Range Management Plan that includes a Follow-up Program for the protection and reclamation of native range. It shall include:
 - (a) on a map or Environmental Alignment Sheets, the locations where native range management and follow-up would be applied;
 - (b) the measures to be applied, and an assessment of the anticipated effectiveness of the proposed mitigation and reclamation strategy;
 - (c) the schedule for implementing the measures as set out in the above;
 - (d) evidence demonstrating that Environment Canada, Canadian Wildlife Service, and Alberta Sustainable Resource Development have reviewed and commented on the Program;
 - (e) the results, evaluation and recommendations for managing native range;
 - (f) the schedule Keystone shall implement to address any unresolved concerns; and
 - (g) a schedule for filing follow-up reports for native range management reports with the Board.
10. Keystone shall file with the Board, at least 30 days prior to the commencement of construction of the approved facilities, a Construction Safety Manual.
11. Keystone shall file with the Board at least 14 days prior to the commencement of construction of the approved facilities, Keystone's final Pipeline Construction Specifications.
12. Keystone shall file with the Board, at least 14 days prior to the commencement of construction of the approved facilities, a detailed construction schedule or schedules identifying major construction activities and shall notify the Board of any modifications to the schedule or schedules as they occur. Keystone shall file construction progress reports on a monthly basis until completion. The report shall include an updated construction schedule identifying major construction activities, information on activities carried out during the reporting period, any environmental and safety issues and noncompliances, and measures undertaken for the resolution of each issue and noncompliance.
13. Keystone shall file with the Board, at least 14 days prior to joining, its field joining program.
14. Keystone shall file with the Board, at least 30 days prior to pressure testing, a pressure testing program for each of the following:
 - (a) New pipeline segments;
 - (b) Pump stations; and
 - (c) Tanks.

15. Keystone shall file with the Board, at least 30 days prior to pressure testing, an emergency response plan for pressure testing activities, including response to a pressure test failure, for each of the following:
 - (a) New pipeline segments;
 - (b) Pump stations; and
 - (c) Tanks.
16. Keystone shall file with the Board, at least 30 days prior to commencement of construction:
 - (a) the comments and recommendations received from the provincial authorities in Saskatchewan and Manitoba regarding the Heritage Resources Impact Assessment; and
 - (b) for approval, the mitigation measures Keystone proposes to address the comments and recommendations in (a).
17. Keystone shall file any watercourse compensation plan required by Fisheries and Oceans Canada for the Project with the Board, at least 14 days prior to the planned start of excavation at watercourses identified in the plan.
18. Keystone shall file with the Board prior to commencement of construction, evidence to confirm that Environment Canada, Canadian Wildlife Service and Alberta Sustainable Resource Development have reviewed and commented on the proposed methods for mitigating the effects of construction and operation of the pipeline on *Species at Risk Act* listed amphibian species.
19. Keystone shall file with the Board prior to commencement of construction, confirmation that Environment Canada, Canadian Wildlife Service (for federal lands), and Alberta Sustainable Resource Development (for Crown lands crossed in Alberta), have reviewed and accepted the proposed seed mixes to be used for the reclamation of the Project, and confirmation that these seed mixes have been obtained.

During Construction

20. In the event of clearing within restricted activity periods for migratory birds, Keystone shall retain a qualified avian biologist to carry out a survey to identify any migratory birds and nests. The spatial boundaries of the survey for the Project will include at least 30 m beyond the disturbance footprint for migratory birds and 100 m beyond the disturbance footprint for raptors. Keystone shall file with the Board:
 - (a) evidence to confirm that Environment Canada and Canadian Wildlife Service have reviewed and commented on the proposed methods for the survey;
 - (b) the results of the survey;
 - (c) mitigation strategies, including monitoring, developed in consultation with Environment Canada and Canadian Wildlife Service to protect any identified migratory birds or their nests; and
 - (d) mitigation, including monitoring, developed in consultation with Environment Canada and Canadian Wildlife Service to protect any identified migratory *Species at Risk Act* birds or their nests.

21. Keystone shall:
- (a) notify the Board in writing of any change from the proposed HDD watercourse crossing methods including those undertaken to comply with CSA Z662-07, and the reasons for that change prior to implementation;
 - (b) provide copies of all correspondence from regulatory authorities relating to the changed crossing method; and
 - (c) file for approval, within 30 days of implementing the changed watercourse crossing method, a description of amended reclamation and re-vegetation measures for the affected watercourse crossings.
22. Keystone shall, during construction, maintain for audit purposes at each construction site:
- (a) a copy of the welding procedures;
 - (b) the non-destructive testing procedures used on the Project; and
 - (c) all supporting documentation related to non-destructive testing.
23. Keystone shall notify the Board 14 days prior to the commencement of excavation of any watercourse crossing that has been assessed for fish and fish habitat.
24. Keystone shall preserve the riparian vegetation during construction and operation of the pipeline for each of the watercourses listed by KP and name: Boyne River 1174.25, 1174.35, 1174.39; Shannon Creek 1201.25; Deadhorse Creek 1205.1; Unnamed 1217.4; Unnamed 1219.73; and Buffalo Creek 1232.86.
25. Keystone shall file with the Board, at least 14 days prior to HDD activities at the Red Deer River, South Saskatchewan River and Boyne River and any additional locations where HDD may take place, a drill execution plan specific to each crossing. Guidance for execution plans can be found in CAPP Publication 2004-0022, "Planning Horizontal Directional Drilling for Pipeline Construction". The execution plans shall consider the following:
- (a) use of drill bit detecting and tracking equipment to confirm the drill path;
 - (b) workspace requirements for equipment at entry and exit points;
 - (c) workspace requirements to construct and layout the pipe drag section;
 - (d) drilling mud and water requirements;
 - (e) environmental protection and monitoring plan;
 - (f) drilling fluid management plans;
 - (g) spill or fluid loss contingency, response, cleanup and mitigation plans;
 - (h) equipment specifications, condition, and integrity; and
 - (i) mitigation of potential detrimental effects of geological formations.

Prior to Submission of First Application for Leave to Open

26. Keystone shall file with the Board, at least 120 days prior to submission of its first leave to open application, an Emergency Procedures Manual for the Project facilities which will include a table with: valve chainage and GPS locations; leak and rupture information; and environmental features. Keystone shall notify the Board of any modifications to the manual as they occur. In preparing its Emergency Procedures

Manual, Keystone shall refer to the Board's *Onshore Pipeline Regulations, 1999* and the corresponding Guidance Notes.

27. Keystone shall file with the Board, at least 120 days prior to submission of its first leave to open application, in conjunction with Keystone's Emergency Procedures Manual, the liaison program for the Project facilities. In preparing the liaison program, Keystone shall refer to sections 33 and 34 of the Board's *Onshore Pipeline Regulations, 1999* and the corresponding Guidance Notes.
28. Keystone shall file with the Board, at least 120 days prior to submission of its first leave to open application, in conjunction with Keystone's Emergency Procedures Manual, the continuing education program for the Project facilities. In preparing the continuing education program, Keystone shall refer to section 35 of the Board's *Onshore Pipeline Regulations, 1999* and the corresponding Guidance Notes.
29. Keystone shall conduct, at least 60 days prior to submission of its first leave to open application and in the appropriate season, boom deployment and ice cutting drill exercises. Keystone shall notify the Board 30 days prior to the drill exercises, of the date and location of the drill.
30. Keystone shall file with the Board, at least 60 days prior to submission of its first leave to open application, a copy of the integrity management program for the facilities of the Project. In preparing the integrity management program, Keystone shall refer to section 40 of the Board's *Onshore Pipeline Regulations, 1999* and the corresponding Guidance Notes.
31. Keystone shall file with the Board, at least 14 days prior to submission of its first leave to open application, a confirmation letter signed by an officer of the Company that lists all liquid related operating procedures, including emergency procedures, that have been developed and confirms that affected personnel have been trained in these operating procedures. The filing required by this condition shall include a statement confirming that the signatory to the filing is an officer of the Company.

Post Construction

32. Keystone shall file with the Board, 6 months after the commencement of operation, and on or before the 31st January for each of the subsequent 5 years, a post-construction environmental monitoring report that:
 - (a) provides a summary of the effectiveness of the environmental mitigation measures applied during construction;
 - (b) identifies deviations from plans and alternate mitigation applied as approved by the Board;
 - (c) identifies locations on a map or diagram where corrective action was taken during construction and the current status of corrective actions;
 - (d) provides proposed measures and the schedule Keystone shall implement to address any unresolved concerns; and
 - (e) evaluates the success of:

- i) re-vegetation as measured against a 85 percent survival rate of recommended plantings;
 - ii) non-native plant vegetation management.
- 33. Keystone shall file with the Board for approval, at least 30 days prior to the planned start of operation, a project specific Environmental Protection Program for the operation and maintenance of the pipeline pursuant to section 48 of the *Onshore Pipeline Regulations, 1999*. The Program shall include practices and procedures for:
 - (a) ongoing environmental training for employees;
 - (b) the handling and disposal of all wastes associated with the operation and maintenance of the pipeline;
 - (c) vegetation management;
 - (d) erosion control on the Right of Way;
 - (e) the management of air and noise emissions;
 - (f) soil conservation;
 - (g) travel on the Right of Way; and
 - (h) environmental monitoring and surveillance of the Right of Way.
- 34. Keystone shall file with the Board, at least 30 days prior to the commencement of operations, Keystone's Project-specific internal standards and practices for the protection of the environment referenced in its application and related submissions in the OH-1-2007 proceeding.
- 35. Keystone shall file with the Board, within 30 days following issuance of the Order for leave to open, a confirmation by an officer of the Company, that the approved Project was completed and constructed in compliance with all applicable conditions in this Certificate. If compliance with any of these conditions cannot be confirmed, the officer of the Company shall file with the Board details as to why compliance cannot be confirmed. The filing required by this condition shall include a statement confirming that the signatory to the filing is an officer of the Company.
- 36. Keystone shall conduct line patrolling (aerial or ground) of Line 100-1 once a week during the first year of operation.
- 37. Keystone shall report to the Board all reportable commodity pipeline accidents and incidents on Line 100-1, as defined by section 2 of the *Transportation Safety Board Regulations*, during the first year of operation.

Expiration of Certificate

- 38. Unless the Board otherwise directs prior to 31 December 2008, this Certificate shall expire on 31 December 2008 unless construction in respect of the facilities has commenced by that date.

